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August 15, 2008

Mary L. Cottrell, Secretary Department of Public Utilities One South Station, 2<sup>nd</sup> Floor Boston, Massachusetts 02110

Re: NSTAR Electric Company, D.P.U. 08-10 2008 Expanded Energy Efficiency Plan

Dear Secretary Cottrell:

On behalf of NSTAR Electric Company ("NSTAR Electric" or the "Company"), please find attached documents supporting NSTAR Electric's expanded 2008 Energy Efficiency Plan ("2008 EE Plan"). The Company's expanded 2008 EE Plan supplements its 2008 EE Plan originally submitted on April 22, 2008, and is being filed pursuant to the July 25, 2008, letter issued by the Department Public Utilities (the "Department") directing all energy efficiency Program Administrators to increase spending for residential heating programs effective as soon as was feasible, and covering the 2008 winter season. The Company is proposing to increase its 2008 Energy Efficiency budget by over \$1.45 million for expanded Energy Efficiency Programs for residential customers from September 1, 2008 through December 31, 2008.

Consistent with the directives of the Department in its July 25, 2008, letter, the Company's proposal includes the following elements: (1) identification of the Company's existing energy efficiency programs that are targeted at residential heating end-uses; (2) identification of the additional dollars the Company projects it can spend in a cost-effective manner; (3) identification and discussion of the constraints that limit the additional dollars the Company projects it can spend cost effectively; (4) identification of the additional number of residential customers that will be served by these expanded programs; (5) quantification of the additional kilowatt-hours ("kWh"), kilowatts ("kW"), therm or million British Thermal Units ("mmbtu") savings that will be achieved; (6) quantification of the dollar savings on monthly bills that additional participants will be expected to realize; (7) indication of the effect the program expansion will have on the cost-effectiveness of the applicable programs; and (8) the Company's proposed mechanism for recovery of incremental expenditures.

In support of its expanded 2008 EE Plan, the Company is filing the Direct Testimony of Penelope McLean Conner, along with Supplemental Pages to the Company's pending 2008 EE Plan. The Supplemental Pages are designed to be inserted into the Company's 2008 EE Plan and

provide a means of comparison between the Company's pending 2008 EE Plan and the effect of expanding the Company's EE programs pursuant to the attached proposal.

In addition, consistent with the Department's July 25, 2008 letter to Energy Efficiency Program administrators, the Company is proposing a cost-recovery mechanism for recovery of incremental Energy Efficiency expenditures. Specifically, the Company is filing revised Energy Efficiency Clause ("EEC") tariffs (M.D.P.U. Nos. 107A, 207A and 307A) that are designed to collect all authorized Energy Efficiency revenues and reconcile such revenues to the Company's actual Energy Efficiency expenditures through an Energy Efficiency Reconciliation Factor ("EERF"). Specifically, the EERF is designed to recover future incremental energy efficiency expenditures authorized by G.L. c. 25, § 19, as amended recently by Chapter 169 of the Acts of 2008 (the "Green Communities Act" or "GCA"), that exceed revenues collected through the Company's currently effective System Benefit Charge ("SBC"). Filing fees of \$300 are attached.

The Company understands the Department's goal of implementing expanded residential heating energy efficiency programs as soon as is feasible and, therefore, it is not proposing that the Department review and approve its revised EEC tariffs contemporaneously with its review and approval of the Company's expanded 2008 EE Plan. Rather, the Company's proposed EEC tariffs are being filed with effective dates of January 1, 2009. The Company hopes filing these proposed tariffs in this filing will allow the Department sufficient time to investigate the Company's proposed EEC tariffs without causing any delay within the context of the expedited review process anticipated for the Company's expanded 2008 EE Plan. The Company is sponsoring the testimony of Mr. Henry C. LaMontagne to describe the Company's proposed cost-recovery mechanism in greater detail.

Lastly, please note that, in review of the Company's 2008 EE Plan in the context of discovery currently pending in this docket, the Company determined that it had inadvertently submitted a version of Table 4 – Summary of Outsourced Services, which had been previously provided in the Company's 2007 EEP. The Company has attached hereto the correct version of Table 4. The attached version of Table 4 should replace the version initially provided in the Company's initial 2008 EE Plan filing on April 22, 2008.

Thank you for your attention to this filing. Should you have any questions, please do not hesitate to contact me.

Very truly yours,

John K. Halib

John K. Habib

Attachments

cc: Benjamin Spruill, Hearing Officer

Barry Perlmutter, Department of Public Utilities

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Kevin Brannelly, Department of Public Utilities
Jed Nosal, Assistant Attorney General
Steven I. Venezia, Department of Energy Resources
Mike Sherman, Department of Energy Resources
Larry Masland, Department of Energy Resources
Roger Borghesani, The Energy Consortium
Rob Garrity, Massachusetts Climate Action Network
Paul Gromer, Northeast Energy Efficiency Council
Jerrold Oppenheim, Low-Income Energy Affordability Network
Robert Rio, Associated Industries of Massachusetts, Inc.
Shanna Vale, Conservation Law Foundation
Robert Shapiro, Rubin and Rudman
Rebecca Tepper, Rubin and Rudman

**Table 4 - Summary of Outsourced Sources** 

Sector	Outsource-Rebate	A001 Program Planning & Administration	A002 Marketing- Advertising	A004 Sales, Technical Assistance & Training	A005 Evaluation & Market Research	Grand Total	Percentage Outsource	Percentage Competitively Bid	Total \$ Competitively Bid
A - Residential	No	\$ 1,034,886	\$ 82,421	\$ -	\$ 88,089	\$ 1,205,396			
	Yes	269,969	1,420,440	2,532,493	517,000	4,739,902	80%	94%	\$ 4,441,524
A - Residential Total		1,304,855	1,502,861	2,532,493	605,089	5,945,298			
B - Low Income	No	443,533	-	-	28,677	472,210			
	Yes	107,555	217,750	611,135	30,000	966,440	67%	26%	247,750
B - Low Income Total	•	551,088	217,750	611,135	58,677	1,438,650			
C - Commercial & Industrial	No	3,000,754	748,073	2,483,075	193,821	6,425,723			
	Yes	665,346	330,000	2,882,253	925,000	4,802,599	43%	81%	3,900,640
C - Commercial & Industrial Total		3,666,100	1,078,073	5,365,328	1,118,821	11,228,322			
Grand Total		\$ 5,522,043	\$ 2,798,684	\$ 8,508,956	\$ 1,782,587	\$ 18,612,270			\$ 8,589,915

# NSTAR ELECTRIC COMPANY

# **Direct Testimony of Penelope McLean Conner**

## **Exhibit NSTAR-PC**

## **D.P.U.** 08-10

1	I.	INTRODUCTION
2	Q.	Please state your name and business address.
3	A.	My name is Penelope McLean Conner. My business address is One NSTAR Way,
4		Westwood, Massachusetts 02090.
5	Q.	By whom are you employed and in what capacity?
6	A.	I am Vice President, Customer Care for NSTAR Electric Company (collectively,
7		"NSTAR Electric" or the "Company") and NSTAR Gas Company.
8	Q.	Please describe your education and professional background.
9	A.	I have a Bachelor Degree in industrial engineering from North Carolina State
10		University. I am also a registered Professional Engineer. Prior to joining the
11		Company, I served as Director of Customer Service for Tampa Electric in Tampa,
12		Florida from 1998 through 2001 and worked at Duke Power for 12 years in Electric
13		Operations and Customer Service from 1986 through 1998.
14		I currently serve on several non-profit Boards of Directors, including the CIS
15		Conference, the Massachusetts Technology Collaborative, the Northeast Energy
16		Efficiency Partnership, Inc. and The Consortium for Energy Efficiency. I have also
17		authored a book entitled "Customer Service: Utility Style" that was recently
18		published. I am also a Columnist for Utility Customer Service for Electric Light &

Power Magazine.

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#### 1 Q. Please describe your present responsibilities.

As Vice President of Customer Care for the Company, I am responsible for overseeing the Company's customer care organization. I am specifically responsible for all customer services including customer inquiries, billing, metering, credit and collections, energy efficiency and energy services.

#### **Q.** What is the purpose of your testimony?

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A. My testimony will describe the Company's request to increase funding for residential heating energy efficiency programs for 2008, including: (1) identification of programs that are proposed to be expanded; (2) the additional dollars the Company projects it can spend on such programs in a cost-effective manner; and (3) related topics identified by the Department of Public Utilities (the "Department") in its July 25, 2008, correspondence to electric and gas companies regarding Increased Funding for Residential Energy Efficiency Programs.

#### Q. What exhibits are you sponsoring in your testimony?

I am sponsoring one exhibit along with this testimony, Exhibit NSTAR-PC. Exhibit

NSTAR-PC-1 includes supplemental pages that are intended to be inserted into the

Company's 2008 Energy Efficiency Plan, filed in this docket on April 22, 2008 (the

"NSTAR Electric EE Plan" or the "EE Plan"). These supplemental pages include

updated information (as shaded text) to facilitate a comparison with those versions of

the pages filed originally with the Company's pending 2008 Energy Efficiency Plan.

#### 1 Q. Is the Company sponsoring additional witnesses to support this filing?

2 A. Yes. The Company is also sponsoring the testimony of Mr. Henry C. LaMontagne. Mr. LaMontagne's testimony describes the Company's proposed mechanism for 3 recovery of incremental expenditures relating to the Company's 2008 energy 4 5 efficiency program expansion efforts described herein. The Company understands 6 the Department's goal of implementing expanded residential heating energy 7 efficiency programs as soon as is feasible and, therefore, the Company's proposed cost recovery mechanism is presented in the form of updated Energy Efficiency 8 9 Charge tariffs with effective dates of January 1, 2009. The proposed cost recovery mechanism is also designed to recover future incremental energy efficiency 10 expenditures authorized by G.L. c. 25, § 19, as amended recently by Chapter 169 of 11 12 the Acts of 2008 (the "Green Communities Act" or "GCA"), that exceed revenues collected through the Company's currently effective System Benefit Charge 13 14 ("SBC").

#### II. DESCRIPTION OF FILING

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#### 16 Q. Please describe the basis of the Company's filing.

A. On July 16, 2008, the Department of Energy Resources ("DOER") filed a letter with the Department requesting that the Department consider an immediate increase in funding for energy efficiency programs targeted at residential heating end-uses, in order address anticipated significant increased costs for heating fuel this winter. On July 25, 2008, the Department issued a letter stating its agreement with DOER that

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there is an urgent need to expand funding for existing residential gas and electric efficiency programs in order to respond to the potential for very high heating costs in the coming months. The Department required all energy efficiency Program Administrators to increase spending for residential heating programs effective as soon as was feasible, and covering the 2008 winter season. The Department noted that it is proposing to limit funding increases to residential and low-income programs at this time, in order to focus on the social costs and health risks associated with the potential for increasing failure of residential customers to meet their winter heating needs.

The Department held a meeting on July 29, 2008, to further discuss its July 25, 2008 letter. On August 1, 2008, the Department issued a Hearing Officer Memorandum directing electric and gas companies to file proposals no later than Friday, August 15, 2008.

#### Q. Please describe the scope of the Company's proposal.

A. Consistent with the directives of the Department in its July 25, 2008, letter, the Company's proposal includes the following elements: (1) identification of the Company's existing energy efficiency programs that are targeted at residential heating end-uses; (2) identification of the additional dollars the Company projects it can spend in a cost-effective manner; (3) identification and discussion of the constraints that limit the additional dollars the Company projects it can spend cost effectively; (4) identification of the additional number of residential customers that

will be served by these expanded programs; (5) quantification of the additional kilowatt-hours ("kWh"), kilowatts ("kW"), therm or million British Thermal Units ("mmbtu") savings that will be achieved; (6) quantification of the dollar savings on monthly bills that additional participants will be expected to realize; (7) indication of the effect the program expansion will have on the cost-effectiveness of the applicable programs; and (8) the Company's proposed mechanism for recovery of incremental expenditures. The filing also addresses whether the Department should consider requiring companies to expanding commercial and industrial ("C&I") energy efficiency programs as well as other programs in 2008.

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# 10 III. EXPANDED 2008 RESIDENTIAL HEATING ENERGY EFFICIENCY PROGRAM ELEMENTS

- 12 Q. Please identify the Company's existing energy efficiency programs that are targeted at residential heating end-uses.
- 14 A. The Company currently offers the following energy efficiency programs that target residential heating end-uses: the Residential New Construction/ENERGY STAR® 15 Homes program, the ENERGY STAR HVAC/COOL SMART program, the 16 Residential Conservation Services/MassSAVE program ("RCS/MassSAVE"), the 17 Residential Multi-Family program, the Low-Income Residential New 18 Construction/ENERGY STAR® Homes program, the Low-Income Single Family 19 20 program, and the Low-Income Multi-Family program.

- Q. Please identify which of these programs the Company proposes to expand and the additional dollars the Company projects it can spend in a cost-effective manner on residential heating end-use customers.
- A. NSTAR Electric projects it can spend an additional \$1,452,530 on energy efficiency programs in a cost-effective manner during the period September 1, 2008 through December 31, 2008. The Company proposes to allocate these additional funds to five of its energy efficiency programs that target residential heating end-uses, as follows:

	2008 EE Plan Filed 04/22/08	2008 EE Plan Supplement 08/15/08	Additional
Program	<b>Total Budget</b>	Total Budget	Funds
RCS/ Mass SAVE	3,378,073	4,052,187	674,114
Residential			
Multi-Family	1,493,225	1,703,330	210,105
Low-Income			
New Construction	534,238	691,838	157,600
Low-Income			
Single Family	3,376,001	3,638,436	262,435
Low-Income			
Multi-Family	1,118,376	1,223,341	<u>104,965</u>
			1,409,219 <sup>1</sup>

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The RCS/MassSAVE program provides energy education and home energy audits to residential customers. The program offers rebates on insulation, air sealing, ENERGY STAR® refrigerators, heating & water heating equipment, and windows. The program also offers customers a low-interest loan option which can be used for

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The difference between the additional funds of \$1,452,530 and the \$1,409,219 allocated to specific program expansion is tax liability, in the amount of \$43,311, associated with performance incentives.

heating equipment upgrades. The Company proposes to increase its budget for the RCS/MassSAVE program by \$674,114. These additional funds will be primarily used to conduct customer audits and for customer incentives to help fund eligible replacement heating systems. The Company is also planning additional marketing efforts to recruit insulation and air sealing contractors to promote the RCS/MassSAVE rebates for insulation upgrades to residential customers. The maximum rebate amount for insulation and air sealing improvements will be increased from the current rebate of \$1,500 to \$2,000 on September 1, 2008. The Residential Multi-Family program serves residential customers in multi-family structures with five or more units. The program provides comprehensive energy assessments, energy education, and offers the installation of low-cost efficiency measures (i.e., hot water measures, CFLs) at no direct cost to the customer. The program also offers incentives for lighting upgrades, replacement of inefficient refrigerators, heat pump testing, duct sealing, insulation, and air sealing. The supplemental budget includes an additional \$210,105 in customer incentives and program implementation costs for participants in the Multi-Family Assessment program. The Low-Income New Construction program captures lost opportunities when single and multi-family housing is built for low-income customers or tenants. The supplemental budget includes an additional \$157,600 in the Low Income-New Construction program to service new construction housing units.

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The Low-Income Single Family program offers a variety of customer incentives including free insulation, ENERGY STAR lighting products, appliance upgrades, and energy consultations into the homes of eligible low-income single-family customers. An additional \$262,435 is included in the Company's proposal to serve participants in the Low Income Single Family program The Low-Income Multi-Family program offers a variety of customer incentives including free insulation, ENERGY STAR lighting products, appliance upgrades, and energy consultations for eligible low-income customers who live in multi-family housing. The Company proposes to increase its budget for the Low Income Multi-Family program by approximately \$104,965 to serve its customers in this sector. Q. Please identify and discuss the constraints that limit the additional dollars the Company projects it can spend cost effectively. A. One constraint that limits additional spending in 2008 is the amount of time needed to cost-effectively spend additional funds. If NSTAR Electric's proposal is approved by September 1, 2008, the Company projects an additional \$1.45 million can be costeffectively spent in the residential and low-income market sectors. However, if approval is delayed beyond September 1, 2008, the amount of additional funds that can be cost-effectively spent decreases as time passes. Other limitations to spending additional funds cost-effectively by the end of 2008 include the time needed to train energy specialists to perform energy audits and to train and hire additional insulation contractors. In the Residential and Low-Income

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- Multi-Family programs, constraints include the additional time needed to recruit participants, assess facility opportunities, and implement recommended improvements.
- 4 Q. How many additional residential customers will be served by these expanded programs?
- The Company plans to serve an average of 27% more customers in the expanded A. 6 7 programs. In addition to the expanded programs, the Company expects to achieve further savings in programs that support increased consumer savings (e.g., ENERGY 8 STAR lighting, ENERGY STAR HVAC) through its planned increase of broad 9 based end-use marketing efforts and consumer outreach. Further, the Company plans 10 to use its outreach opportunities to drive consumers to NSTAR's web-based audit 11 12 tools and work in concert with the DOER, the coalition of Massachusetts utilities, 13 and energy efficiency service providers to consider other innovative energy saving tools as a means to achieve supplemental energy efficiency participation and 14 consumer savings. 15
- Q. Please quantify the additional kWh, kW, therm or mmbtu savings that will be achieved by expanding the Company's residential heating energy efficiency programs.
- 19 A. The Company projects that the additional funds it is proposing to spend to expand its 20 energy efficiency programs in 2008 will achieve the following savings for customers:

Program	kWh	kW	Oil (mmbtu)	Gas (mmbtu)	Propane (mmbtu)
			(mmbtu)	(mmbtu)	(IIIIIDtu)
RCS/MassSAVE	8,417,832	547	5,123	0	197

Residential	3,177,881	202	43	66	0
Multi-Family					
Low-Income	303,800	857	0	5,464	0
New Construction					
Low-Income	1,515,237	128	1,495	0	56
Single Family					
Low-Income	1,403,761	128	184	0	184
Multi-Family					
Additional	14,818,511	1,862	6,845	5,530	437
Savings					

Q. Please quantify the dollar savings on monthly bills that additional participants will be expected to realize.

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4 A. On average, the monthly bill savings the additional participants can expect will be anywhere between \$9 and \$14 depending on the types of measures they install.

# **Q.** What effect may program expansion have on the cost-effectiveness of the applicable programs?

A. For every dollar spent on the program expansion, the Company expects to see an additional \$3 dollars of benefits. In other words, the \$1.4 million dollars spent on program expansion should provide an additional \$4.4 million in benefits over the life of the measures installed.

# 12 Q. Should the Department consider expanding C&I energy efficiency programs in 2008?

14 A. No. The Company does not believe there is sufficient time or customer demand to
15 expand C&I energy efficiency programs in 2008. C&I programs typically have a 616 18 month development cycle. NSTAR Electric is currently ramping up its C&I

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programs for actual expansion in 2009. Also, given the state of the economy in the Commonwealth there is very little new construction taking place in the C&I sector. In addition, many of small business customers do not have sufficient discretionary funds to invest in energy efficiency opportunities at this time. Finally the Company anticipates having sufficient remaining funds to meet anticipated demand through the remainder of 2008.

# Q. How is the Company proposing to recover the incremental expenditures relating to these expanded programs?

A. As the Department is aware, the Company recovers expenditures for its electric energy efficiency programs through its Energy Efficiency Charge tariffs, M.D.T.E. Nos. 107, 207, and 307. These tariffs collect the statutorily-authorized SBC of \$0.00250 kWh from each of the Company's customers. The SBC is capped pursuant to G.L. c. 25, § 19. However, Green Communities Act recently codified an amendment to that statute that allows energy efficiency programs to be funded incrementally through additional sources, as follows: (1) amounts generated by distribution companies under the Forward Capacity Market program administered by ISO-New England; (2) cap and trade pollution control programs; and (3) other funding approved by the Department after consideration of: (a) the effect of any rate increases on residential and commercial customers; (b) the availability of other private or public funds, utility administered or otherwise, that may be available for energy efficiency or demand resources; and (c) whether past programs have lowered

the cost of electricity to residential and commercial customers. Accordingly, the Company is proposing to implement revised Energy Efficiency Charge tariffs consistent with the provisions of the GCA and Department precedent. Mr. LaMontagne's testimony presents the Company's cost recovery mechanism and proposed updated tariffs in greater detail.

#### 6 IV. PROGRAM MARKETING

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- Q. Please describe how the Company intends to market its expanded energy efficiency programs for residential heating customers over the coming months.
- The Company plans to support program ramp-up with additional marketing and 9 A. educational activities. Examples of this include: newspaper advertising, radio spots, 10 web-site updates, direct mail campaign, targeted follow-up to recent audit 11 participants, and Company newsletter and bill messages to all residential customers. 12 The Company also plans to work collaboratively with the DOER, other 13 Massachusetts utilities and energy efficiency service providers to strategize about 14 additional methods to enhance the delivery of audits and consumer education 15 16 outreach opportunities (e.g., conservation kits, audit screening protocols, additional or alternate conservation information services available). Further, the Company 17 plans to reach out to heating contractors and HVAC supply houses via a recently 18 19 contracted "circuit rider" and upcoming HVAC contractor training events as a means 20 to increase high efficiency heating system replacements.

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- 1 Q. Does this conclude your testimony?
- 2 A. Yes, it does.

# **Exhibit NSTAR-PC-1**

# 2008 Energy Efficiency Plan

# Supplemental Pages Addressing Expanded Energy Efficiency Programs for 2008

August 15, 2008



#### **NSTAR Electric**

## **2008 Supplemental Energy Efficiency Plan Pages**

## **INDEX**

- I. Goals Supplemental Page I-1
- II. Budget- Supplemental Pages II-1 through II-7
- III. Cost Effectiveness- Supplemental Page III-1
- IV. Program Description- Supplemental Pages IV-1 through IV-3
- V. Evaluation- NO CHANGES
- VI. Program Incentives- Supplemental Pages IV-5 and IV-6
- VII. Forward Capacity Market- NO CHANGES
- VIII. Appendix A-Benefit/Cost Analysis- Supplemental Pages A-1a through A-5
- IX. Appendix B- Performance Incentives- Supplemental Pages B-1 to B-9
- X. Appendix C- Avoided Cost Study- NO CHANGES
- XI. Appendix D- M&V Plans- NO CHANGES

#### **NSTAR Electric**

### 2008 Energy Efficiency Plan

#### I. Program Goals

NSTAR Electric (the "Company") proposes to implement energy efficiency programs in 2008 that are designed to serve the unique needs of its residential non-low-income, residential low-income, and commercial and industrial ("C&I") customers. The proposed programs incorporate market transformation strategies, services that are targeted directly to end-users and to key trade allies, and strategies that help to minimize lost-opportunities. They also produce long-term energy and demand savings as well as other resource and non-resource benefits.

The Company's proposed energy efficiency programs are expected to provide savings and net benefits as shown in the following table:

Program Goals –

Sector	Net Lifetime MWh Savings	Net Lifetime Summer Demand Savings (kW – Years)	Value of Non-Electric Benefits (\$000)	Total Net Benefits (\$000)
Residential Non-Low-Income				
Residential Low-Income				
C&I				
Total – All Sectors				

#### II. Budget

In 2008, the Company projects that it will have approximately million available to fund energy efficiency efforts, including funding for the proposed performance incentive.

This section of the Energy Efficiency Plan includes the following tables:

Table 1 - a summary of projected collections by sector,

Table 2 - a summary of the sources of funding by sector,

Table 3 – detailed budgets for each proposed energy efficiency program, and

Table 4 - a summary of outsourced services in 2008.

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Funding for the calendar year 2008 includes estimated proceeds from the Company's participation in the Forward Capacity Market. See page Table 2 (Sources of Funding) for additional details.

Conservation Charge	\$0.00250
Conservation Charge Low Income	\$0.00025

Presentation in Energy Efficiency Plan											
Additional Additional											
Sector	Category	A000 Funding	Funding - FCM (1)	Funding	Total Funding						
A - Residential	01 - Collections	\$12,194,416	\$819,699	\$911,395	\$13,925,510						
B - Low Income	01 - Collections	\$4,960,580	\$333,446	\$541,135	\$5,835,161						
C- Commercial & Industrial	01 - Collections	\$30,567,202	\$2,066,855	\$0	\$32,634,057						

	Са	Iculation for .25 mill or 20%-Resid	lential Budget F	unding Methodology	
Sector	Annual kWh	\$ - Minimum LI: \$.00025 X Total or 20%-Residential Budget	% (Res-R2) or %C&I: (Res-R2) or C&I ((Res-R2) + C&I)	Collects w/ SL	LI Collections from Res or C&I
Residential including R-2 (Res)	5,683,431,600		27.3%	\$13,563,890	\$1,924,879
R-2 (LI)	299,302,390			754,013	
Commercial & Industrial (C&I)	14,310,063,800		72.7%	36,050,423	3,111,954
Street Lighting (SL)	153,835,120				
Total	20,147,330,520	\$5,036,833		\$50,368,326	\$5,036,833

<sup>(1)</sup> Includes actual funds received from ISO-New England in 2007 as well as funds projected to be received in 2008 during the transition to the Forward Capacity Market.

Table 2 - Sources of Funding

Sector	Category Detail	Total
A - Residential	A01a Collections (+)	\$13,563,890
	A01b Carryover (+/-)	(100,149)
	A01c Carryover Interest (+/-)	(13,230)
	A01d Actual versus Forecasted (+/-)	(85,230)
	A01e Low Income (-) (.25 mills method)	(1,170,866)
	A01f Low Income Actual versus Forecasted (-/+) (.25 mills method)	0
	A01g Low Income Contribution Additional (-)	0
	A01h Other Funding (FCM) (+) (1)	819,699
	A01i Additional Funding (+)	911,395
A - Residential Total		13,925,510
B - Low Income	B01a Collections [Residential] (+) (.25 mills method)	1,924,879
	B01b Collections [Commercial & Industrial] (+) (.25 mills method)	3,111,954
	B01c Carryover (+/-)	(36,758)
	B01d Carryover Interest (+/-)	(4,856)
	B01e Actual versus Forecasted [Low Income]	(34,639)
	B01f Actual versus Forecasted [Commercial & Industrial] (+/-) (.25 mills method)	0
	B01g Funding Additional [Residential] (+)	0
	B01h Funding Additional [Commercial & Industrial] (-)	0
	B01i Other Funding (FCM) (+) (1)	333,446
	B01j Additional Funding (+)	541,135
B - Low Income Total		5,835,161
C - Commercial & Industrial	C01a Collections (+)	36,050,423
	C01b Carryover (+/-)	(1,794,936)
	C01c Carryover Interest (+/-)	(290,041)
	C01d Actual versus Forecasted (+/-)	(286,290)
	C01e Low Income (-) (.25 mills method)	(3,111,954)
	C01f Low Income Actual versus Forecasted (-/+)	0
	C01g Low Income Contribution Additional (+)	0
	C01h Other Funding (FCM) (+) (1)	2,066,855
	C01i Additional Fudning (+)	\$0
C - Commercial & Industrial Tot		32,634,057
Grand Total		\$52,394,727

Table 3a - Residential Budget

						A004 Sales,	A005	5	
		A001 Prograi	n A0	02	A003	Technical	Evaluation 8	A007	
		Planning	& Marketin	g-	Customer	Assistance &	Market	Performance	
Category	Program	Administratio	n Advertisi	ng	Incentive	Training	Research	Incentive	<b>Grand Total</b>
02 - Lost Opportunity	A02a ENERGY STAR Homes	\$ 142,998	\$ 279,28	0 \$	805,607	\$ 446,943	\$ 112,440	\$ 97,797	\$ 1,885,065
	A02b ENERGY STAR HVAC	212,413	201,54	1	740,625	174,295	136,110	79,333	1,544,317
02 - Lost Opportunity Total		355,411	480,82	1	1,546,232	621,238	248,550	177,130	3,429,382
03 - Retrofit	A03a Residential Conservation Service	191,086	509,85	4	2,132,478	921,750	92,015	205,004	4,052,187
	A03b Residential Multi-Family	90,057	32,76	6	1,283,500	209,500	•	87,507	1,703,330
03 - Retrofit Total		281,143	542,62	0	3,415,978	1,131,250	92,015	292,511	5,755,517
04 - Products & Services	A04a ENERGY STAR Lighting	209,353	377,46	6	1,628,000	464,266	264,524	159,453	3,103,062
	A04b ENERGY STAR Appliances	105,804	15,94	8	90,000	41,159	-	14,252	267,163
04 - Products & Services Total		315,157	393,41	4	1,718,000	505,425	264,524	173,705	3,370,225
05 - Information & Education	A05a Residential Education Program	128,068	95,41	5	-	506,602	•	-	730,085
05 - Information & Education Total		128,068	95,41	5	-	506,602	•	-	730,085
06 - Research & Development & Pilots	A06a HEAT Loan Program			-	-		-	-	-
	A06b Conservation Lottery			-	-	-	-	-	-
06 - Research & Development & Pilots Total				-	-	-	•	-	-
07 - General Support	A07a NUP Funding	70,993						-	70,993
	A07b Sponsorships & Subscriptions	61,900						-	61,900
	A07c DOER Funding	92,183						-	92,183
	A07e Tax Liability							415,225	415,225
07 - General Support Total		225,076			·			415,225	640,301
Grand Total	<u>-</u>	\$ 1,304,855	<b>\$</b> 1,512,27	0 \$	6,680,210	\$ 2,764,515	\$ 605,089	\$ 1,058,571	\$ 13,925,510

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#### Table 3b - Low Income Budget

							A004 Sales,		A005		
		A001 Program	1				Technical	Eva	aluation &	A007	
		Planning &	A	002 Marketing	A0	03 Customer	Assistance &		Market	Performance	
Category	Program	Administration		Advertising		Incentive	Training		Research	Incentive	<b>Grand Total</b>
02 - Lost Opportunity	B02a Energy Star Homes LI	\$ 143,921	\$	-	\$	392,479	\$ 113,142	\$	9,559	\$ 32,737	\$ 691,838
02 - Lost Opportunity Total		143,921		-		392,479	113,142		9,559	32,737	691,838
03 - Retrofit	B03a Low-Income Single-Family Program	155,422		135,000		2,671,036	471,359		39,559	166,061	3,638,437
	B03b Low-Income Multi-Family Program	144,190		82,750		778,651	137,409		9,559	70,782	1,223,341
03 - Retrofit Total		299,612		217,750		3,449,687	608,768		49,118	236,843	4,861,778
07 - General Support	B07a Low Income Energy Affordability Network	70,056								-	70,056
	B07c DOER Funding	37,499								-	37,499
	B07d Tax Liability									173,990	173,990
07 - General Support Total		107,555								173,990	281,545
Grand Total		\$ 551,088	\$	217,750	\$	3,842,166	\$ 721,910	\$	58,677	\$ 443,570	\$ 5,835,161

Table 3c - Commercial and Industrial Budget

Category	Program	A001 Program Planning & Administration	A002	Marketing-	A003 Customer Incentive	A004 Sales Technical Assistance & Training	è	A005 Evaluation & Market Research		Grand Total
02 - Lost Opportunity	C02a Construction Solutions	\$ 1,060,562	\$	367,691	\$ 6,000,000	\$ 1,393,225	\$	467,683	\$ 486,905	\$ 9,776,066
02 - Lost Opportunity Total		1,060,562		367,691	6,000,000	1,393,225		467,683	486,905	9,776,066
03 - Retrofit	C03a Business Solutions	1,215,573		474,580	7,000,000	1,624,878		439,994	559,235	11,314,260
	C03b Small Business Solutions	572,248		188,360	5,925,000	1,875,367		211,144	461,526	9,233,645
	C03c Demand Response	36,878		13,682	-	48,446		-	-	99,006
03 - Retrofit Total		1,824,699		676,622	12,925,000	3,548,691		651,138	1,020,761	20,646,911
04 - Products & Services	C04e ENERGY STAR Benchmarking	23,812		13,051	-	266,875		-	-	303,738
04 - Products & Services Total		23,812		13,051	-	266,875		-	-	303,738
	C05b Massachusetts Energy Efficiency Partnership	21,935		2,485	-	57,824		-		82,244
	C05d Compressed Air Challenge	42,763		13,282	-	20,216		-	-	76,261
	C05f Web-based Education Software	15,196		2,471	-	46,948		-	-	64,615
	C05g O&M Training	11,787		2,471	-	31,549		-	-	45,807
05 - Information & Education T	otal	91,681		20,709	-	156,537		-		268,927
07 - General Support	C07a NUP Collaborative	179,007								179,007
	C07b Sponsorships & Subscriptions	253,901							-	253,901
	C07d DOER Funding	232,438							-	232,438
	C07f Tax Liability								973,068	973,068
07 - General Support Total		665,346		•	•	-		-	973,068	1,638,414
C&I Total	_	\$ 3,666,100	\$	1,078,073	\$ 18,925,000	\$ 5,365,328	\$	1,118,821	\$ 2,480,734	\$ 32,634,056
Grand Total (Residential, Low-	Income & C&I)	\$ 5,522,043	\$	2,808,093	\$ 29,447,376	\$ 8,851,753	\$	1,782,587	\$ 3,982,875	\$ 52,394,727

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#### Table 4 - Summary of Outsourced Services

Sector	Sector		A001 Program Planning & Administration		A002 Marketing- Advertising		A004 Sales, Technical Assistance & Training		A005 Evaluation & Market Research		Grand Total	Percentage Outsource	Percentage Competitively Bid	Total \$ mpetitively Bid
A - Residential	A - Residential	No	\$	1,034,886	\$	82,421	\$	-	\$	88,089	\$ 1,205,396			
		Yes		269,969		1,429,849		2,764,515	5	17,000	4,981,333	81%	94%	\$ 4,682,767
A - Residential Total	A - Residential Total			1,304,855		1,512,270		2,764,515	6	05,089	6,186,729			
B - Low Income	B - Low Income	No		443,533		-		-		28,677	472,210			
		Yes		107,555		217,750		721,910	:	30,000	1,077,215	70%	23%	247,750
B - Low Income Total	B - Low Income Total			551,088		217,750		721,910		58,677	1,549,425			
C - Commercial & Industrial	C - Commercial & Industrial	No		3,000,754		748,073		2,483,075	1	93,821	6,425,723			
		Yes		665,346		330,000		2,882,253	9.	25,000	4,802,599	43%	81%	3,900,640
C - Commercial & Industrial T	C - Commercial & Industrial T	otal		3,666,100		1,078,073		5,365,328	1,1	18,821	11,228,322			
Grand Total	Grand Total		\$	5,522,043	\$	2,808,093	\$	8,851,753	\$ 1,7	82,587	\$ 18,964,476			\$ 8,831,157

#### **III.** Program Cost-Effectiveness

#### A. Plan Results

The Company has projected the expected benefits and costs associated with the energy efficiency programs and services that it plans to administer in 2008 consistent with the requirements delineated in D.T.E. 98-100. The table below summarizes the expected benefits, costs, and the benefit/cost ratio ("BCR") for the portfolio of programs that will be implemented in 2008. For more detailed information about the benefits and costs associated with the individual programs, all of which were found to be cost-effective, see Appendix A.

#### Program Cost-Effectiveness

When updating the benefit/cost model for 2008, the Company considered a number of factors in the analysis. NSTAR Electric reviewed and updated all of the assumptions used in its cost-effectiveness models to reflect current program experience and market conditions, such as rebate levels, cost of equipment, savings, etc. The Company continued to work with the other Massachusetts utilities to reach agreement on virtually all of the common assumptions included in the 2008 program screening analysis for the residential programs.

As in past years, the Company has included the value of non-electric resource and non-resource benefits related to expected program installations in its assessment of cost-

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Benefits include the value of electric savings, the value of non-electric resource benefits, and the value of other benefits that are expected to result from planned program efforts.

Costs include those costs projected in the Company's annual energy efficiency budget (i.e., program implementation expenses, evaluation costs, and proposed performance incentives) plus any customer contributions received. All costs are included in the cost-effectiveness analysis except for the tax liability related to performance incentives.

#### **IV.** Program Descriptions

The Company's proposed program efforts in 2008 include refinements to its 2007 program efforts, presented in the Company's 2007 Energy Efficiency Plan. A summary of the changes to 2007 program efforts is provided below.

#### A. Residential Non Low-Income Programs

The Residential Non Low-Income Programs to be offered in 2008 build on the Company's experience in implementing these programs in 2007. Changes to be adopted in 2008 reflect findings from program evaluation studies, consideration of actual experience in the field, and enhancements to program efforts that are intended to increase the likelihood that overall objectives related to program efforts will be achieved.

#### Summary of Proposed Changes to Residential Programs for 2008

#### 1. Lost Opportunity

Program	Changes
Residential New Construction (ENERGY STAR® Homes)	<ul> <li>Implement a consumer advertising campaign</li> <li>CODE PLUS #2 -\$325 incentive for single family homes and \$225 incentive for multi family homes that meet Air Sealing requirements of 6ACH CFM 50 8% leakage</li> <li>ENERGY STAR #1 - \$750 incentive for single family homes and \$650 incentive for multi family homes that meet ENERGY STAR with HERS index of 85-71</li> <li>ENERGY STAR #2 - \$1,250 incentive for single family homes and \$1,150 incentive for multi family homes that meet ENERGY STAR with HERS index of 70-51</li> <li>CFL installations - \$2 per CFL installed to electrician</li> </ul>

# 1. Lost Opportunity (cont.)

Program	Changes
ENERGY STAR HVAC (Central Air Conditioning and Heat Pumps)  COOL SMART	<ul> <li>Incentives may be adjusted subject to market conditions</li> <li>\$500 consumer rebate for the purchase and installation of properly sized equipment of SEER 14, EER of 12 or higher</li> <li>\$100 incentive to contractors when customers receive a \$500 rebate where the equipment has been properly sized thru a Manual J calculation.</li> <li>\$40 incentive to equipment distributors for each processed COOL Card rebate application</li> <li>Investigate savings potential for "Hybrid" heat pump heating/cooling system for rebate consideration</li> <li>Participate in industry negotiated cooperative promotions</li> <li>Develop an enhanced early retirement pilot component of COOL Smart in 2008 with the following features:         <ul> <li>Additional \$400 customer rebate and \$100 contractor incentive</li> <li>Seasonal promotion of April 15 thru June 30</li> <li>QIV, sizing, and replacement equipment SEER=&gt;14, EER=&gt;12 required for all installations</li> <li>Existing system must be operable and 10 SEER or less</li> </ul> </li> <li>Promote thru Mass-Save, direct mail, and digital check-up</li> </ul>

#### 2. Retrofit

Program	Changes
Residential Conservation Services	<ul> <li>Investigate increasing incentive from \$1500 to \$1800</li> <li>Develop new financing options to replace HEAT loan</li> <li>The Company will continue to investigate and evaluate new residential technologies and educational devices (e.g., Power Cost Monitor) as potential program measure offerings.</li> </ul>

Program	Changes
Residential Conservation Services (cont.)	<ul> <li>Working Poor Provision: The Company plans to expand the no cost energy efficiency services currently provided to Low-Income customers to customers with incomes that range between 60% and 80% of the medium income. In order to support and help meet potential demand, these customers may also be served by the Low-Income CAP agencies.</li> <li>Increase the current weatherization offering from 50% up to \$1500 to 75% up to \$2000. This would help many customers who need thermal upgrades.</li> <li>Modify current Heat Loan offer to enable customers to receive BOTH the 0% loan up to \$10,000 and incentives and rebates for eligible program measures. This is consistent with the previously legislated Heat Loan offer in 2006 and the recently enacted Green Communities Act Heat Loan provision. Heat Loan costs would be tracked and reported separately for further consistency.</li> </ul>
Residential Multifamily	No changes

#### **B.** Residential Low-Income Programs

NSTAR will continue to actively participate in the "Best Practices Working Group" to support and implement program enhancements.

The Residential Low-Income Programs to be offered in 2008 build on the Company's experience in implementing these programs in 2007. Changes to be adopted in 2008 reflect findings from program evaluation studies, consideration of actual experience in the field, and enhancements to program efforts that are intended to increase the likelihood that overall objectives related to program efforts will be achieved.

The Company plans to investigate and evaluate additional program elements as potential program measure offerings.

#### 1. Lost Opportunity

Program	Changes
Low-Income	Increase marketing outreach to consumers and builders
Residential New	• Market-based HERS contractor service delivery begins 1/1/2008, the final
Construction	fee structure will be approved by the Joint Management Committee
(ENERGY STAR®	New GasNetworks® & Renewable incentives will be incorporated
Homes)	• Incentives may be adjusted subject to market conditions
	• Code Plus (6ACH CFM50, 8%duct leakage): SF- \$325, MF - \$225
	• ENERGY STAR I (HERS index 85-66): SF - \$750, MF - \$650
	• ENERGY STAR II (HERS index < 65) : SF - \$1,250, MF - \$1,150

## 2. Retrofit

Program	Changes
Low-Income Single Family	<ul> <li>No changes</li> <li>Working Poor Provision: The Company plans to work with the CAP agencies to expand the no cost energy efficiency services currently provided to customers that have incomes below 60% of median income to customers with incomes that range between 60% and 80% of the medium income. In order to support and help meet potential demand, these customers may also be served under the Residential Conservation Services program a.k.a MassSAVE.</li> </ul>
Low-Income Multi Family	• No changes

# Appendix A: Table A-1a Summary of Benefit/Cost Ratios by Program Lifetime Impacts of Measures Installed in 2008

(with Canacity DRIPF)

BCR Activity	TRC Benefit/ Cost	TRC Net Benefits	Total Benefits (\$000)	Total Costs (\$000)	PA Costs (\$000)
Residential	<del> </del>	T	Т		
A02a Residential Lost Opportunity	2.79	\$4,921	\$7,667	\$2,747	\$2,037
A02b Residential HVAC	1.49	857	2,590	1,733	1,654
A03a Residential Retrofit 1-4	2.54	8,366	13,788	5,422	4,346
A03b Residential Retrofit Multifamily	1.50	904	2,717	1,813	1,790
A04a Residential Lighting	7.75	27,199	31,231	4,031	3,322
A04b Residential Appliances	1.18	66	429	362	362
A07x Performance Incentive Tax Liability			-		415
Subtotal: Residential	3.63	42,313	58,421	16,108	13,926
Low Income		T		Ī	
B02a Low-Income Lost Opportunity	4.38	2,376	3,078	703	703
B03a Low-Income Retrofit 1-4	1.83	3,092	6,798	3,706	3,706
B03b Low-Income Retrofit Multifamily	1.76	948	2,200	1,252	1,252
B07x Performance Incentive Tax Liability			·	·	174
Subtotal: Low Income	2.13	6,416	12,077	5,661	5,835
Commercial & Industrial		T	T	Ī	
C02a C&I Lost Opportunity	5.07	42,810	53,322	10,513	9,991
C03a Large C&I Retrofit	5.16	79,382	98,461	19,079	12,168
C03b Small C&I Retrofit	3.51	27,986	39,134	11,147	9,502
C07x Performance Incentive Tax Liability		,	, -	,	973
Subtotal: C&I	4.69	150,178	190,917	40,739	32,634
Grand Total	4.18	\$198,907	\$261,415	\$62,509	\$52,395

#### Notes:

- 1) Costs include: Program Implementation Expenses, Evaluation Costs, Performance Incentives, as well as Customer Costs. They do not include the Tax Liability for Performance Incentives.
- 2) Benefit Values for CO2 reductions and Energy DRIPE are not included in the cost-effectiveness analysis of the 2008 programs in the total benefits summarized above. The CO2 reductions would result in an additional \$53,363,353 in benefits for the 2008 programs, equivalent of 20.4% of the benefits described above. The Energy DRIPE would result in additional \$25,622,192 benefits for the 2008 programs, equivalent to 9.8% of the benefits represented above.

#### Appendix A: Table A-1b Summary of Benefit/Cost Ratios by Program Lifetime Impacts of Measures Installed in 2008 All Scenarios

	Total Benefits (\$000)	TRC Benefit/ Cost	Total Benefits (\$000)	TRC Benefit/ Cost	Total Benefits (\$000)	TRC Benefit/ Cost	Total Benefits (\$000)	TRC Benefit/ Cost
BCR Activity	without ADDERS		including Ca	pacity DRIPE	including Capacity DRIPE and Energy DRIPE		including Capacity DRIPE Energy DRIPE and CO2 Costs	
Residential								
A02a Residential Lost Opportunity	\$7,526	2.74	\$7,667	2.79	\$7,807	2.84	\$8,150	2.97
A02b Residential HVAC	2,388	1.38	T /	1.49	2,696		2,932	1.69
A03a Residential Retrofit 1-4	13,553	2.50	13,788	2.54	14,267	2.63	15,331	2.83
A03b Residential Retrofit Multifamily	2,657	1.47	2,717	1.50	3,065	1.69	3,813	2.10
A04a Residential Lighting	30,140	7.48	,	7.75		9.26		11.69
A04b Residential Appliances	381	1.05		1.18	435	1.20	451	1.24
A07x Performance Incentive Tax Liability								
Subtotal: Residential	56,646	3.52	58,421	3.63	65,612	4.07	77,818	4.83
Low Income								
B02a Low-Income Lost Opportunity	3,036	4.32	3,078	4.38	3,088	4.39	3,115	4.43
B03a Low-Income Retrofit 1-4	6,750	1.82	6,798	1.83	7,018	1.89	7,542	2.04
B03b Low-Income Retrofit Multifamily	2,169	1.73	2,200	1.76	2,331	1.86	2,664	2.13
B07x Performance Incentive Tax Liability								
Subtotal: Low Income	11,955	2.11	12,077	2.13	12,437	2.20	13,321	2.35
Commercial & Industrial								
C02a C&I Lost Opportunity	51,618	4.91	53,322	5.07	57,915	5.51	68,232	6.49
C03a Large C&I Retrofit	95,126	4.99	98,461	5.16	108,755		131,274	6.88
C03b Small C&I Retrofit	37,518	3.37	39,134	3.51	42,319		•	4.46
C07x Performance Incentive Tax Liability					•			
Subtotal: C&I	184,262	4.52	190,917	4.69	208,989	5.13	249,262	6.12
Grand Total	\$252,863	4.05	\$261,415	4.18	\$287,037	4.59	\$340,401	5.45

#### Notes:

<sup>1)</sup> Costs include: Program Implementation Expenses, Evaluation Costs, Performance Incentives, as well as Customer Costs. They do not include the Tax Liability for Performance Incentives.

<sup>2)</sup> Benefit Values for CO2 reductions and Energy DRIPE are not included in the cost-effectiveness analysis of the 2008 programs in the total benefits summarized above. The CO2 reductions would result in an additional \$53,363,353 in benefits for the 2008 programs, equivalent of 20.4% of the benefits described above. The Energy DRIPE would result in additional \$25,622,192 benefits for the 2008 programs, equivalent to 9.8% of the benefits represented above.

# Appendix A: Table A-2 Detailed Summary of Costs by Program

				Cost Categorie	es			
BCR Activity	Programs/General Support	Total TRC Costs	Total PA Costs	Program	Evaluation	Customer	Shareholder	
Residential				Implementation		Cost	Incentive	
A02a Residential Lost Opportunity	A02a Energy Star Homes		\$ 1,885,065	\$ 1,674,828	\$ 112,440	\$ 710,000	\$ 97,797	
.,	A05a Residential Education Program		114,848	114,848				
	A07 General Support		36,611	36,611				
A02a Residential Lost Opportunity Total		\$ 2,746,524	2,036,524	1,826,287	112,440	710,000	97,797	
A02b Residential HVAC	A02b Energy Star HVAC		1,544,317	1,328,874	136,110	79,519	79,333	
	A05a Residential Education Program		79,905	79,905				
	A07 General Support		29,698	29,698				
A02b Residential HVAC Total		1,733,439	1,653,920	1,438,477	136,110	79,519	79,333	
A03a Residential Retrofit 1-4	A03a Residential Conservation Service		4,052,187	3,755,168	92,015	1,076,253	205,004	
	A05a Residential Education Program		228,619	228,619				
	A07 General Support		64,764	64,764				
A03c Residential Retrofit 1-4 Total		5,421,823	4,345,570	4,048,551	92,015	1,076,253	205,004	
A03b Residential Retrofit Multifamily	A03b Multi-Family Program		1,703,330	1,615,823	-	23,125	87,507	
	A05a Residential Education Program		57,365	57,365				
	A07 General Support		28,975	28,975				
A03b Residential Retrofit Multifamily Total		1,812,795	1,789,670	1,702,163	-	23,125	87,507	
A04a Residential Lighting	A04a Energy Star Lighting	1	3,103,062	2,679,085	264,524	709,200	159,453	
_	A05a Residential Education Program	1	159,387	159,387				
	A07 General Support		59,693	59,693				
A04a Residential Lighting Total		4,031,342	3,322,142	2,898,165	264,524	709,200	159,453	
A04b Residential Appliances	A04b Energy Star Appliances		267,163	252,911	-	-	14,252	
	A05a Residential Education Program		89,961	89,961				
	A07 General Support		5,335	5,335				
A04b Residential Appliances Total		362,459	362,459	348,207	-	-	14,252	
A07x Perf. Incentive Tax Liability			415,225					
Subtotal: Residential		16,108,382	13,925,510	12,261,850	605,089	2,598,097	643,346	
Low Income								
B02a Residential Lost Opportunity - LI	B02a Energy Star Homes LI		691,838	649,542	9,559	-	32,737	
	B07 General Support/LEAN		11,054	11,054				
B02a Residential Lost Opportunity - LI Tot		702,892	702,892	660,596	9,559	-	32,737	
B03a Low-Income Retrofit 1-4	B03a Low-Income Single-Family Program		3,638,436	3,432,816	39,559	-	166,061	
	B07 General Support/LEAN		67,558	67,558				
B03a Low-Income Retrofit 1-4 Total		3,705,994	3,705,994	3,500,374	39,559	-	166,061	
B03b Residential Retrofit Multifamily - LI	B03b Low-Income Multi-Family Program		1,223,341	1,143,000	9,559	-	70,782	
	B07 General Support/LEAN		28,943	28,943				
B03b Residential Retrofit Multifamily - LI T	otal	1,252,284	1,252,284	1,171,943	9,559	-	70,782	
B07x Perf. Incentive Tax Liability			173,990					
Subtotal: Low Income		5,661,170	5,835,160	5,332,913	58,677	-	269,580	
Commercial & Industrial	Coop Construction Colutions No. Construction	+	0.770.000	0.004.4=0	407.000	F04.000	400.00=	
C02a C&I Lost Opportunity	C02a Construction Solutions - New Construction	1	9,776,066	8,821,478	467,683	521,883	486,905	
000 - 0011 1 0 1 - T 1	C07 General Support	10 510 005	214,876	214,876	407.000	504.000	400.005	
C02a C&I Lost Opportunity Total	1000 - P 0 - 1	10,512,825	9,990,942	9,036,354	467,683	521,883	486,905	
C03a Large C&I Retrofit	C03a Business Solutions		11,314,260	10,315,031	439,994	6,910,859	559,235	
	C04e ENERGY STAR Benchmarking		303,738	303,738				
	C05b Massachusetts Energy Efficiency Partnership C05d Compressed Air Challenge		82,244 76,261	82,244				
			76,261 45,807	76,261 45,807				
	C05g O&M Training							
	C03c Demand Response C07 General Support	1	99,006 246,794	99,006 246,794				
C03a Large C&I Retrofit Total	Cor General Support	19,078,969	12,168,110	11,168,881	439,994	6,910,859	EE0 005	
C03a Large C&I Retrofit Total C03b Small C&I Retrofit	C03b Small Business Solutions	19,078,969	9,233,645	8,560,975	211,144		559,235	
CU3D Small C&I Retrotit		1			211,144	1,645,224	461,526	
	C05f Web-based Education Software	1	64,615	64,615				
COOK Constit Coll Detectit Tetal	C07 General Support	44 447 400	203,676	203,676	044.444	4.045.004	404 500	
C03b Small C&I Retrofit Total		11,147,160	9,501,936	8,829,266	211,144	1,645,224	461,526	
C07x Perf. Incentive Tax Liability		40 700 05 4	973,068	20 024 524	4 440 004	0.077.000	4 507 000	
Subtotal: C&I		40,738,954	32,634,056	29,034,501	1,118,821	9,077,966	1,507,666	
TOTAL		\$ 62,508,506	\$ 52,394,726	AC COO CO.	£ 4 700 F07	\$ 11,676,063	<b>6 0 400 500</b>	
IVIAL		Ψ 02,300,300	Ψ 32,354,720	Ψ 40,023,204	Ψ 1,102,301	ψ 11,070,003	Ψ 2,420,392	

## Appendix A: Table A-3 Detailed Summary of Benefits by Program

							Total I	Benefits						Lo	ad Reduc	tion	MWh Saved		Va	alue
					Capacity				Ene			Non E	ectric						Energy	Non Electric
			Genera					Wir		Sum			Non-							CO2
		Total Benefits	Summer	Winter	Trans	MDC	DRIPE	Peak	Off Peak	Peak	Off Peak	Resource	Resource	Summer	Winter	Lifetime	Annual	Lifetime	DRIPE	Reductions
		Data																		
Sector	BCR Activity	Total Ben	SumCapVal	WinCanVal	TransVal	DistVal	DRIPE VALUE	WinPkVal	WinOffVal	SumPkVal	SumOffVal	ResVal	NonResVal	Sum kW	Win kW	Life kW	Ann MWh	Lifet MWh	Sum Energy DRIPE	CO2 Reductions
A - Residen		\$58.421.411	\$4.282.804		\$1,119,745	\$6.857.639	\$1.775.564	\$9.425.108	\$9.868.495	\$5.131.504	\$4.884.657	\$12,332,427	\$2.743.468	4.835	13.172	48.880	53.774	359,046	\$7,190,289	
A INCOIDCI	A02a Residential Lost Opportunity	7.667.241	821.960	0	174.866	1.070.930	141,460	297.122	314.026	149,446	152,974	4.501,214	43,242	381	689	8,662	1.034	12.426	139,513	. , ,
	A02b Residential HVAC	2.590.111	653.077	0	157.673	965.635	201.736	250,343	59,293	324,121	91.588	-115.511	2.156	557	44	6.954	589	9.029	105,682	
	A03a Residential Retrofit 1-4	13.787.708	1,167,050	0	255,865	1.566.988	234,767	751.081	797,641	700,928	477,817	7.677.136	158,436	663	771	12.335	4.215	34,795	479,708	
	A03b Residential Retrofit Multifamily	2,717,069	142,498	0	37.683	230,784	59,953	602,291	639,290	297,992	309,900	269.588	127,090	166	607	1,549	2,609	23,689	348,070	
	A04a Residential Lighting	31,230,707	1,377,264	0	462,661	2,833,465	1,090,349	7,511,413	8,044,612	3,652,636	3,845,762	0	2,412,544	2,939	11,060	18,106	45,275	278,598	6,110,434	
	A04b Residential Appliances	428,576	120,954	0	30,997	189,837	47,300	12,858	13,632	6,381	6,617	0	0	128	0	1,275	51	510	6,883	15,784
B - Low Inc	ome	12,076,878	438,565	0	104,047	637,215	121,654	784,924	830,202	395,939	404,066	7,312,770	1,047,496	368	951	4,622	3,213	32,936	360,136	884,452
	B02a Low-Income Lost Opportunity	3,078,499	181,439	0	40,852	250,192	42,555	24,480	25,799	12,446	12,606	2,417,072	71,059	115	273	1,838	73	1,064	9,801	26,815
	B03a Low-Income Retrofit 1-4	6,798,061	146,542	0	36,967	226,394	48,105	458,653	485,651	230,388	236,048	4,234,210	695,103	164	426	1,608	2,128	18,999	220,074	523,832
	B03b Low-Income Retrofit Multifamily	2,200,318	110,584	0	26,228	160,629	30,994	301,792	318,753	153,104	155,412	661,489	281,333	90	252	1,175	1,013	12,873	130,261	333,805
C - Comme	rcial & Industrial	190,916,959	24,438,345	0	5,685,990	34,822,620	6,654,581	40,493,198	12,875,399	51,869,127	12,450,770	0	1,626,928	17,939	9,178	247,011	104,195	1,425,076	18,071,767	40,272,993
	C02a C&I Lost Opportunity	53,322,389	7,430,072	0	1,665,256	10,198,502	1,704,040	6,104,240	1,522,735	20,869,939	3,657,650	0	169,955	4,593	1,218	74,848	23,286	388,835	4,592,346	10,317,110
	C03a Large C&I Retrofit	98,460,942	11,424,973	0	2,702,775	16,552,558	3,335,026	23,469,981	8,083,280	25,365,379	7,135,012	0	391,959	8,991	5,851	115,697	60,504	776,107	10,294,478	22,518,863
	C03b Small C&I Retrofit	39,133,627	5,583,301	0	1,317,960	8,071,560	1,615,515	10,918,977	3,269,383	5,633,809	1,658,108	0	1,065,015	4,355	2,108	56,465	20,405	260,134	3,184,943	7,437,020
Grand Tota		\$261,415,248	\$29,159,714	\$0	\$6,909,783	\$42,317,474	\$8,551,799	\$50,703,231	\$23,574,096	\$57,396,570	\$17,739,492	\$19,645,197	\$5,417,892	23,141	23,300	300,513	161,182	1,817,058	\$25,622,192	\$53,363,353

Benefit Values for CO2 reductions and Energy DRIPE are not included in the cost-effectiveness analysis of the 2008 programs in the total benefits summarized above. The CO2 reductions would result in an additional \$53,363,353 in benefits for the 2008 programs, equivalent of 20.4% of the benefits described above. The Energy DRIPE would result in additional \$25,622,192 benefits for the 2008 programs, equivalent to 9.8% of the benefits represented above.

Page A-3 Benefits by Program

## Appendix A: Table A-4 Benefit/Cost Ratio Inputs by Program

Sector	BCR Activity	Program	Measure	End Use	Quantity / Participation Year 1	Measure Life (years)	Total Resource Cost	Incentive	Customer Cost	Free- Ridership Rate	Spillover[P articipant]	Spillover[Non- Participant] Rate	In-Service	kWh Persistenc
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes		BHVAC	710	Circ (years)	\$ 2.400	\$ 1,400	\$ 1,000	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes	RNC ES Homes (Cooling)	BHVAC	710	25	\$ 2,400	\$ 1,400	\$ 1,000	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes	RNC ES Homes (Water Heating)	EHoWa	710	15	\$ -	\$ -	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes	CP ES Homes (Heating)	BHVAC	0	25	\$ -	\$ -	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes	CP ES Homes (Cooling)	BHVAC	0	25	\$ -	\$ -	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes	CP ES Homes (Water Heating)	EHoWa	0	15	\$ -	\$ -	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes	Refrigerators	DRefr	0	13	\$ -	\$ -	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes	Dishwashers	EHoWa	0	11	\$ -	\$ -	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes	Fixtures	ALght	577	11	\$ -	\$ -	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02a Residential Lost Opportunity	A02a ENERGY STAR Homes		ALght	14,350	9	\$ -	\$ -	\$ -	0.00%	0.00%	0.00%	99.00%	100.00%
A - Residential A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC A02b ENERGY STAR HVAC	CoolSmart AC SEER 14 (Equip) - EER 11.5-11.99 CoolSmart HP SEER 14 (Equip) -	BHVAC	417 25	18	\$ 300 \$ 300	\$ 300 \$ 300	\$ -	15.00% 15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart AC SEER 14 => (Equip) - EER>=12	BHVAC	205	10	\$ 450	\$ 300	\$ 150	15.00%	0.00%	0.00%	100.00%	100.00%
	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart HP SEER 14=> (Equip)	BHVAC	8	18			\$ 150	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart AC SEER 15.0 => (Equip) - EER>=12.5	BHVAC	409	18			\$ 300	15.00%	0.00%	0.00%	100.00%	100.00%
	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart HP SEER 15.0 => (Equip)	BHVAC	36	18		•		15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart AC QIV NES	BHVAC	232	18	\$ 175		\$ -	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart AC QIV ES	BHVAC	109	18	\$ 175	\$ 175	\$ -	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart HP QIV NES	BHVAC	59	18	\$ 175	\$ 175	\$ -	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart HP QIV ES	BHVAC	0		\$ 175			15.00%	0.00%	0.00%	100.00%	100.00%
	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart AC Digital Check-up/Tune-up	BHVAC	767		\$ 175			15.00%	0.00%	0.00%	100.00%	100.00%
	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart HP Digital Check-up/Tune-up	BHVAC	8		\$ 175		\$ -	15.00%	0.00%	0.00%	100.00%	100.00%
	A02b Residential HVAC	A02b ENERGY STAR HVAC	CoolSmart Wm Air Furnace ECM (GN Reb)	BHVAC	500	18	\$ 200		\$ -	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential A - Residential	A02b Residential HVAC A02b Residential HVAC	A02b ENERGY STAR HVAC	Duct Sealing - 100 CFM redcution in leaks 20% of flow to 10%  Down Size 1/2 ton	BHVAC BHVAC	20 25	18	\$ 140 \$ 300	\$ 140 \$ 300	\$ -	15.00% 15.00%	0.00%	0.00%	100.00%	100.00% 100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC		BHVAC	5	18	\$ 300	* ***	\$ -	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC	Rightsizing on Tier I or II	BHVAC	0	18	\$ 300	\$ 300	\$ -	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC		Early Replacement of equip age 13 years old, rmng life 7 years with ES Equip		200	7	\$ 800	\$ 500	\$ 300	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC		Energy Star QI (QI only) - duct leakage going from 30% to 15%	BHVAC	0	18	\$ 500	\$ 400	\$ 100	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A02b Residential HVAC	A02b ENERGY STAR HVAC	Energy Star QI with Duct Modifications - duct leakage going from 30% to 15%	6 BHVAC	0	18	\$ 1,200	\$ 1,100	\$ 100	15.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation	Free CFL	ALght	48,015	9	\$ 7	\$ 7	\$ -	2.00%	0.00%	0.00%	90.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation	Free CFL (piggyback on other utility audits	ALght	11,000	9	\$ 7	\$ 7	\$ -	2.00%	0.00%	0.00%	90.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4		Refrigerator (savings over remaining life of existing equipment)	DRefr	1,004	1	\$ 224	\$ 150	\$ 74	35.00%	36.00%	0.00%	100.00%	100.00%
	A03a Residential Retrofit 1-4		Refrigerator (savings over full life compared to new baseline equipment)	DRefr	1,004	13	•	\$ -	\$ -	35.00%	36.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	592	25	,	\$ 750	\$ 750	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential A - Residential	A03a Residential Retrofit 1-4 A03a Residential Retrofit 1-4	A03a Residential Conservation A03a Residential Conservation		BHVAC BHVAC	0	25	\$ 1,500 \$ 1,500	\$ 750 \$ 750	\$ 750 \$ 750	2.00% 2.00%	0.00%	0.00%	100.00% 100.00%	100.00% 100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	0	20	\$ 1,500	\$ 750	\$ 750	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	89	15	\$ 1,500	\$ 325	\$ 325	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation	· ··· · · · · · · · · · · · · · · ·	BHVAC	12	15	\$ 650	\$ 325	\$ 325	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	1	15	\$ 650	\$ 325	\$ 325	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation	Air Sealing, Other Fuels	BHVAC	0	15	\$ 650	\$ 325	\$ 325	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation	Duct Seal, Oil	BHVAC	0	20	\$ 950	\$ 475	\$ 475	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	0	20	\$ 950	\$ 475	\$ 475	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	0	20	\$ 950	\$ 475	\$ 475	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	0	20	\$ 950	\$ 475	\$ 475	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential A - Residential	A03a Residential Retrofit 1-4 A03a Residential Retrofit 1-4	A03a Residential Conservation A03a Residential Conservation		BHVAC	0	20	\$ 550	\$ 275	\$ 275 \$ 275	2.00%	0.00%	0.00%	100.00% 100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation A03a Residential Conservation		BHVAC	0	20	\$ 550 \$ 550		\$ 275 \$ 275	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	0	20	\$ 550		\$ 275	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	924	10	\$ 100	\$ 50	\$ 50	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	133	10	\$ 100	\$ 50	\$ 50	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	89	10			\$ 50	2.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation	Heating System Replacement, Oil	BHVAC	600	18	\$ 500	\$ 400	\$ 100	0.00%	0.00%	0.00%	100.00%	100.00%
	A03a Residential Retrofit 1-4		Heating System Replacement, Other Fuels	BHVAC	0	18	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\$ 100	0.00%	0.00%	0.00%	100.00%	100.00%
	A03a Residential Retrofit 1-4	A03a Residential Conservation		EHoWa	300	20		•	\$ 300	0.00%	0.00%	0.00%	100.00%	100.00%
	A03a Residential Retrofit 1-4		Indirect Water Heater, Other Fuels	EHoWa	0	20			\$ 300	0.00%	0.00%	0.00%	100.00%	100.00%
	A03a Residential Retrofit 1-4	A03a Residential Conservation		EHoWa	12		\$ 17			2.00%	0.00%	0.00%	100.00%	100.00%
	A03a Residential Retrofit 1-4	A03a Residential Conservation		EHoWa	41		\$ 17			2.00%	0.00%	0.00%	100.00%	100.00%
	A03a Residential Retrofit 1-4 A03a Residential Retrofit 1-4	A03a Residential Conservation A03a Residential Conservation		EHoWa EHoWa	2 245		\$ 17 \$ 17			2.00%	0.00%	0.00%	100.00% 100.00%	100.00%
	A03a Residential Retrofit 1-4 A03a Residential Retrofit 1-4		Heating System Replacement, Gas	BHVAC	0	10	\$ 500		\$ 100	0.00%	0.00%	0.00%	100.00%	100.00%
	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	1.350	25	\$ 240		\$ 230	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	0	25	\$ 240		\$ 230	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	100	25			\$ 230	0.00%	0.00%	0.00%	100.00%	100.00%
A - Residential	A03a Residential Retrofit 1-4	A03a Residential Conservation		BHVAC	50	25	\$ 240	\$ 10	\$ 230	0.00%	0.00%	0.00%	100.00%	100.00%
	***			-	•									

## Appendix A: Table A-4 Benefit/Cost Ratio Inputs by Program

A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Insulation BHVAC 36 25 \$ A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Air Sealing BHVAC 26 15 \$		Incentive	Customer Cost	Free- Ridership Rate	articipant] Rate	Rate	In-Service Rate	kWh Persistenc e
IA - Residential IAO3b Residential Retrofit Multifamily IAO3b Multi-Family Program IAir Sealing IRHVAC I 26 I 15 I C	- \$	-	\$ -	3.00%	0.00%	0.00%	100.00%	100.00%
- · · · · · · · · · · · · · · · · · · ·	- \$	-	\$ -	3.00%	0.00%	0.00%	100.00%	100.00%
A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Refrigerator (savings over remaining life of existing equipment) DRefr 18 1 \$ A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Refrigerator (savings over full life compared to new baseline equipment) DRefr 18 1 \$ \$	- \$		\$ -	3.00%	0.00%	0.00%	104.00%	100.00%
A - Residential A030 Residential Retrofit Multifamily Pooram Screw-in Bulbs A- Residential Retrofit Multifamily Pooram Screw-in Bulbs A- Residential Retrofit Multifamily Pooram Screw-in Bulbs	- \$	-	\$ -	3.00%	0.00%	0.00%	104.00%	100.00%
A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Indoor Fixture ALght 727 20 \$	- \$	-	\$ -	3.00%	0.00%	0.00%	104.00%	100.00%
A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program CAC Commissioning BHVAC 0 5 \$	- \$	-	\$ -	3.00%	0.00%	0.00%	100.00%	100.00%
A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Thermostats, FF BHVAC 0 10 \$	- \$	-	\$ -	3.00%	0.00%	0.00%	100.00%	100.00%
A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Thermostats, elec BHVAC 1,607 10 \$ A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program DHW, electric EHoWa 21 7 \$	- \$	-	\$ -	3.00% 3.00%	0.00%	0.00%	100.00% 104.00%	100.00% 100.00%
A - Residential Ad30 Residential Retroit Multifamily Ad30 Multi-Family Program DHW, FF Ad4t 0 8 \$	- 5	-	\$ -	3.00%	0.00%	0.00%	104.00%	100.00%
A - Residential A030 Residential Retrofit Multifamily Pooram   Common Area Int Fixtures   ALpht 1.485   3 \$	- \$	-	\$ -	3.00%	0.00%	0.00%	104.00%	100.00%
A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Common Area Ext Fixtures ALight 319 9 \$	- \$	-	\$ -	3.00%	0.00%	0.00%	104.00%	100.00%
A - Residential A03b Residential Retrofit Multifamily A03b Multi-Family Program Multifamily Participant ALght 2,500 1 \$	525 \$	500	\$ 25	3.00%	0.00%	0.00%	100.00%	100.00%
A - Residential A04a Residential Lighting A04a Energy Star Lighting Screw-in Bulbs ALght 650,000 6 \$	3 \$	2	\$ 1	0.00%	0.00%	0.00%	116.76%	100.00%
A - Residential A04a Residential Lighting A04a Energy Star Lighting Indoor Fixture ALght 7,000 20 \$ A - Residential A04a Residential Lighting A04a Energy Star Lighting Outdoor Fixture ALght 7,000 15 \$	19 \$	15	\$ 4	8.00%	4.00%	0.00%	95.00%	100.00%
A - Residential A04a Residential Lighting A04a Energy Star Lighting Outdoor Fixture ALght 2,500 15 \$ A - Residential A04a Residential Lighting A04a Energy Star Lighting Torchiere ALght 500 8 \$	16 \$ 20 \$	5 15 5 15		12.00%	7.00%	0.00%	87.00% 83.00%	100.00%
A - Residential A04a Residential Lighting A04a Energy Star Lighting Screw-in Bulbs - School Fundraiser ALght 40,000 6 \$	4.45 \$	4.45	\$ -	6.00%	25.00%	0.00%	50.00%	100.00%
A Residential A04b Residential Appliances A04b Energy State Products AC BHVAC 3,000 10 \$	30 \$	30	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI LI RNC ES Homes (Heating) BHVAC 414 25 \$	1,500 \$	1,500	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI LI RNC ES Homes (Cooling) BHVAC 414 25 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI LI RNC ES Homes (Water Heating) EHoWa 414 15 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI LI CP ES Homes (Heating) BHVAC 0 25 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI LLCP ES Homes (Cooling) BHVAC 0 25 \$ B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI LLCP ES Homes (Water Heating) EHOWa 0 15 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00% 100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI LI CP ES Homes (Water Heating) EHoWa 0 15 \$ B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI Refrigerators DRefr 0 13 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes L1 Dishwashers EHoWa 0 11 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes L1 Fixtures ALght 0 20 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B02a Low-Income Lost Opportunity B02a Energy Star Homes LI LI ES Homes Screw-in Bulbs ALght 832 9 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	99.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Famil Baseload HEUBe 2,282 5 \$	96 \$		\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893 1   8 - Low Income Retrofit 1-4 B03a Low-Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893 13   5 - Low Income Retrofit 1-4 B03a Low-Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893 13   5 - Low Income Retrofit 1-4 B03a Low-Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893 13   5 - Low Income Retrofit 1-4 B03a Low-Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893 13   5 - Low Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893 13   5 - Low Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893 1   5 - Low Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893   1   5 - Low Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893   1   5 - Low Income Single-Fami Refrigerator (savings over remaining life of existing equipment) DRefr 893   1   1   1   1   1   1   1   1   1	224 \$	224	\$ -	0.00%	0.00%	0.00%	100.00% 100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-FamilRefrigerator (savings over full life compared to new baseline equipment) DRefr 893 13 \$ B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-FamilEetic Wx BHVC 0 20 \$	1,400 \$	1.400	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-FamilOil Wx BHVAC 212 20 \$	2,400 \$	2,400	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Fami Heating System Retrofit BHVAC 305 18 \$	500 \$	500	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-FamilCFL's ALght 20,266 16 \$	15 \$	15	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Famil Fixtures ALght 1,055 20 \$	96 \$	96	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Famil Torchiere ALght 7 8 \$ B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Famil 2nd Refrigerator Removal DRefr 20 1 \$	78 \$	78	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retroit 1-4 B03a Low-Income Single-Family To require February 1 B03a Low-Income Retroit 1-4 B03a Low-Income Retroit 1-4 B03a Low-Income Retroit 1-4 B03a Low-Income Single-Family Freezer Replacement DReft 0 13 \$	405 \$	405	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B B03a Low-Income Retrofit 1-4 B03a Low-Income Single-FamilWaterbed EHoWa 0 20 \$	440 \$	440	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Fami DHWater Measure (elec) EHoWa 0 7 \$	16 \$	16	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Famil DHWater Measure (OIL) EHoWa 83 7 \$	16 \$	16	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Fami DHWater Measure (gas&other) EHoWa 0 7 \$	16 \$	16	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Famil AC or POOL Timer HEUBe 0 5 \$ B - Low Income B03a Low-Income Retrofit 1-4 B03a Low-Income Single-Famil Window AC Replacements BHVAC 0 12 \$	17 \$ 290 \$	5 17 5 290	\$ -	0.00%	0.00%	0.00%	100.00% 100.00%	100.00%
B - Low Income B03a Low-Income Retroit 1-4 B03a Low-Income Single-Family Nation AC Replacements B7VAC 95 10 \$	100 \$	100	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamin/B03b Low-Income Multi-Family/Baseload HEUBe 1,183 5 \$	96 \$	96	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamin B03b Low-Income Multi-Family Refrigerator (savings over remaining life of existing equipment) DRefr 88 1 \$	224 \$	224	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamily B03b Low-Income Multi-Family Refrigerator (savings over full life compared to new baseline equipment) DRefr 88 13 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamily B03b Low-Income Multi-Family Electric Wx BHVAC 0 20 \$	1,400 \$	1,400	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamiily B03b Low-Income Multi-Family Oil Wx BHVAC 0 \$   B - Low Income B03b Low-Income Retrofit Multifamiily B03b Low-Income Multi-Family Heating System Retrofit BHVAC 0 18 \$	2,400 \$ 500 \$	2,400	\$ -	0.00%	0.00%	0.00%	100.00% 100.00%	100.00%
B - Low income B03b Low-income Retroit MultifamilyB03b Low-income Multi-FamilyICFL's ALgth 8.450 16 \$	15 \$	5 15	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit MultifamilyB03b Low-Income Multi-FamilyFixtures ALght 2,422 20 \$	96 \$	96	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamily B03b Low-Income Multi-Family Torchiere Al.ght 0 8 \$	78 \$	78	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamiiy B03b Low-Income Multi-Famiiy 2nd Refrigerator Removal DRefr 0 1 \$	- \$	-	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamily B03b Low-Income Multi-Family Freezer Replacement DRefr 0 13 \$	405 \$		\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamiiy B03b Low-Income Multi-Famiiy Waterbed EHoWa 0 20 \$ B - Low Income B03b Low-Income Retrofit Multifamiiy B03b Low-Income Multi-Famiiy DHWater Measure (elec) EHoWa 0 7 \$	440 \$ 16 \$	\$ 440 \$ 16	\$ - \$ .	0.00%	0.00%	0.00%	100.00% 100.00%	100.00% 100.00%
B - Low Income B03b Low-Income Retrofit Multifamily B03b Low-Income Multi-Family DHWater Measure (elec) EHoWa 0 7 \$ B - Low Income B03b Low-Income Retrofit Multifamily B03b Low-Income Multi-Family DHWater Measure (OIL) EHoWa 0 7 \$	16.00 \$	16.00	\$ .	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit MultifamilyB03b Low-Income Multi-FamilyDHWater Measure (gas&other) EHoWa 0 7 \$	16.00 \$	16.00	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit MultifamilijB03b Low-Income Multi-FamilyAC or POOL Timer HEUBe 0 5 \$	17.00 \$	17.00	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamity B03b Low-Income Multi-Family Window AC Replacements BHVAC 0 12 \$	290.00 \$	290.00	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%
B - Low Income B03b Low-Income Retrofit Multifamily B03b Low-Income Multi-Family Tstats BHVAC 224 10 \$	100.00 \$	100.00	\$ -	0.00%	0.00%	0.00%	100.00%	100.00%

#### APPENDIX B - TABLE 1

#### **Available Performance Incentive Dollars**

1.	Actual Energy Efficiency Expenses		\$48,411,852	
2.	After Tax Performance Incentive Rate (%)		5.00%	
		Threshold	<u>Design</u>	Exemplary
3.	Incentive Range	75%	100%	110%
4.	Potential Available After-Tax Incentive	\$1,815,444	\$2,420,593	\$2,662,652
	Available After-Tax Incentive by Component:	Threshold	<u>Design</u>	Exemplary
5.	Component 1: Savings Incentive	\$843,160	\$1,124,213	\$1,236,634
6.	Component 2: Value Incentive	\$641,397	\$855,196	\$940,715
7.	Component 3: Performance Metrics	\$330,888	\$441,184	\$485,302
8.	Grand Total Available Incentive	\$1,815,444	\$2,420,593	\$2,662,652

#### Calculation of Available After-Tax Incentive by

	Component	_	weights i	or incentive C	omponents
		Expenses	<u>Savings</u>	<u>Value</u>	Perf. Metrics
9.	Residential	\$12,866,938	45%	35%	20%
10.	Low Income	\$5,391,591	30%	10%	60%
11.	Commercial and Industrial	\$30,153,323	50%	40%	10%
12.	Total	\$48,411,852			

Wainless for Incombine Common and

- The "Actual Energy Efficiency Expenses" include all estimated Energy Efficiency Program Expenses net of Shareholder Incentives.
- 2. Performance Incentive Rate.
- 3. The incentive range is 75% to 110% in 2004-07.
- 4. The three levels of potential performance incentive described in each Administrator's Energy Efficiency Plan. Total Design level incentive = (Line 1 x Line 2), Threshold level incentive = 75% of Design level incentive and Exemplary level incentive = 110% of Design level incentive.
- 5., 6., 7. The three components of the Company's shareholder incentive described in each Administrator's Energy Efficiency Plan. The Design level incentives are calculated and allocated according to the weights in lines 9, 10, and 11.
  - 8. Sum of Lines 5 through 7.
- 9., 10., 11. For each customer class and incentive component, the design incentive is equal to the expenses times the incentive rate in Line 2 times the weight for the component.
  - 12. Total expenditures; sum of Lines 9 through 11.

#### APPENDIX B - TABLE 2

## **Component 1: Savings Incentive**

1. Available Design Level Savings Incentive	\$1,124,213	
	9	% of \$ Benefits
2. Design (Targeted) Lifetime MWH	1,817,058	57.2%
3. Design (Targeted) Lifetime kW	300,513	33.3%
4. Design (Targeted) Lifetime Non-Electric Benefits	\$25,063,089	9.6%
5. \$/Lifetime MWh Savings Incentive Rate	\$0.3536	
6. \$/Lifetime kW Savings Incentive Rate	\$1.2441	
7. \$/Lifetime Non-Electric Benefits Incentive Rate	\$0.0043	
8. Exemplary Performance (Cap - Savings Incentive)	1,236,634	

- 1. Available Design Level Savings Incentive, from Table 1.
- 2. From Energy Efficiency Plan; % of Benefits (in \$) from Table 3.
- 3. From Energy Efficiency Plan; % of Benefits (in \$) from Table 3.
- 4. From Energy Efficiency Plan; % of Benefits (in \$) from Table 3.
- 5. (Line 1 times Line 2 %) / Line 2 MWh
- 6. (Line 1 times Line 3 %) / Line 3 kW
- 7. (Line 1 times Line 4 %) / Line 4 Non-Electric Benefits
- 8. Exemplary Level Savings Incentive, from Table 1.

#### APPENDIX B - TABLE 3

#### **Component 2: Value Incentive**

1. Available Design Level Value Incentive	\$855,196	Valu	e of Benefits (S	\$)
		MWh	kW	Non-Electric
2. Design (Plan) Benefits	\$261,415,248	\$149,413,389	\$86,938,770	\$25,063,089
3. Design (Plan) Costs	\$62,508,506	57.2%	33.3%	9.6%
4. Design (Plan) Net Benefits	\$198,906,742			
5. Exemplary Performance (Cap - Value Incentive)	\$940,715			

- 1. Available Design Level Value Incentive, from Table 1.
- 2. Planned benefits.
- 3. Planned costs. Includes all cost categories in the cost-effectiveness test, except it does not include Performance Incentive costs.
- 4. Line 2 minus Line 3.
- 5. Exemplary Level Value Incentive, from Table 1.

#### APPENDIX B - TABLE 4a

### **Component 3: Performance Metrics**

1. Available Design Level Performance Metrics Incentive (Sum of the Metrics) \$441,184

2. Exemplary Level - Performance Metrics \$485,302

3. % of Design Level

- 1. Sum of all Performance Metrics (Design Level), adjusted based on the total expenditures and the available performance incentive (from Table 1).
- 2. Exemplary Level for Performance Metrics, from Table 1. Cannot exceed exemplary level for this component in Table 1.
- 3. Line 2 / Line 1.

Residential	Performance Metric Description	Thre	eshold	Des	sign	Exem	plary
Program/Initiative	•	Units	Dollars	Units	Dollars	Units	Dollars
	Threshold: Initiate a feasibility study to determine the requirements and components of integrating the Massachusetts residential energy efficiency websites (e.g., ES Homes, MassSAVE, CoolSmart, myenergystar.com, estarlights, GasNetworks) into a seamless and consumer friendly web-based design.	See Description	\$24,125				
E-Commerce Enhancements	<b>Design:</b> Develop an RFP that incorporates a "one look" network, with seamless integration across programs. The purpose of the RFP is to award one vendor oversight and control of developing and maintaining a consolidated web-based network for various programs.			See Description	\$32,167		
	<b>Exemplary</b> : Review proposals and award the RFP by year end 2008 with an established implementation and completion timeline in 2009. Cooperate with DOER on statewide web portal, as appropriate.					See Description	\$35,384
	Threshold: Prepare and send out an RFP for a project to investigate and document current residential energy efficiency program infrastructure in Massachusetts (Including approximat counts and capacity of trades associated with energy efficiency service delivery (HVAC, plumbers, insulation installers, etc.), energy services companies, and PAs' energy efficiency personnel), and to assess the ability of the infrastructure to meet a potential increased demand for energy efficiency services, and to make recommendations for increasing capacit if needed. The RFP will include a work plan laying out specific issues to be addressed in the report, including: staffing levels & ability to expand staffing, training and experience of staff, current workloads, interest in working with utility program sponsors, and statewide coverage of services.	See Description	\$24,125				
Energy Efficiency Infrastructure Development	Design: Hire a vendor to conduct the project and prepare the report.			See Description	\$32,167		
	Exemplary: Complete the final report in 2008 and schedule a sponsor meeting to discuss the report findings.					See Description	\$35,384

Pages B-5 Performance Metrics

Residential	Performance Metric Description	Thre	shold	Des	ign	Exem	plary
Program/Initiative (cont.)	•	Units	Dollars	Units	Dollars	Units	Dollars
	Threshold: Develop and provide a pilot design for Zero Net Energy Homes. Include renewable energy, innovative technologies and products, and 'best practice' HVAC installations. Provide incentives, comprehensive technical assistance, and other appropriate support to encourage builders to participate. The maximum modeled energy performance rating of homes will be HERS index 30 or better.	See Description	\$24,125				
New Construction: Near Zero Energy Home demo project	<b>Design:</b> Recruit at least three builders to participate in the pilot with at least one of their homes. Builders will sign an MOU indicating their intention to participate and agreeing that all participating homes are scheduled to be substantially completed by December 31, 2009.			See Description	\$32,167		
	<b>Exemplary:</b> One of the participating pilot homes is considered 'affordable', using the HUD income guidelines (80% of area median income). Provide a pilot status update memo documenting 2008 pilot accomplishments.					See Description	\$35,384
	Threshold: Develop a strategy to examine and pursue options for adopting a residential energy code at least as stringent as the national ENERGY STAR Homes standard in Massachusetts municipalities, and facilitate one introductory meeting among communities.	See Description	\$24,126				
New Construction: Support Residential New Construction Code development	<b>Design</b> : Encourage at least three municipalities to pursue the adoption of an ENERGY STAR equivalent code and support the process toward adoption in each municipality.			See Description	\$32,168		
	<b>Exemplary</b> : For at least one municipality, provide the technical specifications and support necessary so the town could develop an ordinance and/or law that will put in place a building code at least as stringent as the national ENERGY STAR Homes standard.					See Description	\$35,385
Subtotal - Residential			\$96,502		\$128,669		\$141,536

Pages B-6 Performance Metrics

Low-Income	Performance Metric Description	Thre	eshold	Design		Exem	plary
Program/Initiative	•	Units	Dollars	Units	Dollars	Units	Dollars
Low-Income #1: Best Practices Working Group	Design: In coordination with LEAN, implement best practices as agreed in 2007. Continue at least quarterly discussions and technology analysis. This will include reviewing the frequency and cost of CFLs installed per home, providing written updates on meetings, analyses and additional best practices implemented, and continuing to assess possible new measures, including indirect hot water heating and demand control measures.			See Description	\$40,437		
	Exemplary: To achieve Exemplary, the Design level for Low Income Metrics 1, 2, and 3 must be attained.					See Description	\$44,481
Low-Income #2: Best Practices Auditor Training	Design: Contribute funding and logistical support of LEAN's efforts and those of the Massachusetts Department of Housing and Community Development (DHCD) for auditor training and explore common protocols in areas identified through the Best Practices Working Group. This will include developing and distributing new auditor training materials related to PC use and other plug loads and exploring expanding program efforts to identify and treat "Mystery Houses" including protocols for distribution to auditors. ("Mystery House refers to homes with 5 or more kWh per day of unaccounted for electrical usage.)  Exemplary: To achieve Exemplary, the Design level for Low Income Metrics 1, 2, and 3 must be			See Description	\$40,437		
	attained.					See Description	\$44,481

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Pages B-7 Performance Metrics

Low-Income Initiative	Performance Metric Description	Thre	shold	Des	ign	Exem	plary
(cont.)	-	Units	Dollars	Units	Dollars	Units	Dollars
	Threshold: N/A						
Low-Income #3: Best Practices Contractor Support	Design: In coordination with LEAN and the Massachusetts Department of Housing and Community Development (DHCD), contribute funding and logistical support of LEAN's efforts and those of DHCD to continue efforts to recruit Weatherization contractors, at a level commensurate with anticipated need, review and revise technical specifications document and support classroom training and hold a bidders meeting for contractors based on the new measures specifications.			See Description	\$40,437		
	Exemplary: To achieve Exemplary, the Design level for Low Income Metrics 1, 2, and 3 must be attained.					See Description	\$44,481
	Threshold: In coordination with LEAN, DHCD to the extent practical, other Massachusetts utilities, and other stakeholders, continue Energy Bucks campaign through March 2008 and prepare a memorandum that describes campaign activities completed during winter 07/08.	See Description	\$30,328				
Low-Income #4: Outreach	Design: In coordination with LEAN, other MA utilities, and other stakeholders, provide a summary of the numbers of customers who contacted the call center and website. Collect information from CAP agency staff on their perceptions of the effectiveness of the Energy Bucks campaign. Summarize information in a memorandum that facilitates decision making for Exemplary level of this metric.			See Description	\$40,437		
	Exemplary: In coordination with LEAN, other MA utilities, all gas distribution companies in the Commonwealth, to the extent practical and other stakeholders, recommend appropriate statewide marketing/outreach activities for the winter of 08/09 in a memorandum informed by the data collected in the Design level of this metric.					See Description	\$44,481
ubtotal - Low Income:	•		\$30,328		\$161,748		\$177,923

Pages B-8 Performance Metrics

C&I Program/Initiative	Performance Metric Description	Thres	shold	Des	ign	Exem	plary
C&I Flogram/imuative		Units	Dollars	Units	Dollars	Units	Dollars
	15 percent of 2008 new construction and major renovation projects that include lighting projects commit to go through the performance lighting path and achieve a collective average of 30% savings beyond the Mass. energy code in effect on 1/1/08. Projects that qualify under this program must be new construction projects or renovation projects that involve the installation of new fixtures throughout the building or renovated spaces (in greater than 75% of the space).  (Incentive results are scalable)	See Description	\$56,537				
Performance Lighting Information supporting results will be provided to the NUP advisors by April 1, 2009	20 percent of 2008 new construction and major renovation projects that include lighting projects commit to go through the performance lighting path and achieve a collective average of 35% savings beyond the Mass, energy code in effect on 1/1/08. Projects that qualify under this program must be new construction projects or renovation projects that involve the installation of new fixtures throughout the building or renovated spaces (in greater than 75% of the space).  (Incentive results are scalable)			See Description	\$75,383		
	25 percent of 2008 new construction and major renovation projects that include lighting projects commit to go through the performance lighting path and achieve a collective average of 40% savings beyond the Mass, energy code in effect on 1/1/08. Projects that qualify under this program must be new construction projects or renovation projects that involve the installation of new fixtures throughout the building or renovated spaces (in greater than 75% of the space).  (Incentive results are scalable)					See Description	\$82,921
	X% of non-CDA/non-comprehensive path new construction projects between 10,000 and 100,000 square feet follow the practices established in the Advanced Buildings Core Performance Guide. The metric will be documented through submissions of signed MOUs identifying participation in the Advanced Buildings Core Performance process, commitment to these design and construction standards. and anticipated completion date.  (Incentive results are scalable)	NSTAR = 6	\$56,538				
Advanced Buildings  Information supporting results will be provided to the NUP advisors by April 1, 2009.				NSTAR = 8	\$75,384		
						NSTAR = 10	\$82,922
Subtotal - Commercial & I	ndustrial		\$113,075		\$150,767		\$165,844
Total Component 3 - Perfo	rmance Metrics		\$239,905		\$441,184		\$485,302

Pages B-9 Performance Metrics

#### **NSTAR ELECTRIC COMPANY**

## Direct Testimony of Henry C. LaMontagne

#### **Exhibit NSTAR-HCL**

#### **D.P.U. 08-10**

1 T	INTRODUCTIO	N

- 2 Q. Please state your name and business address.
- 3 A. My name is Henry C. LaMontagne. My business address is One NSTAR Way,
- 4 Westwood, Massachusetts 02090.
- 5 Q. By whom are you employed and in what capacity?
- 6 A. I am Director of Regulatory Policy and Rates for the regulated operating companies
- of NSTAR. In this capacity, I am responsible for pricing and rate design activities
- 8 for NSTAR Electric Company ("NSTAR Electric" or the "Company") and NSTAR
- 9 Gas Company.
- 10 Q. Please describe your education and professional background.
- 11 A. I graduated from the University of Massachusetts Dartmouth in 1968 with a
- Bachelor of Science degree in Electrical Engineering. Upon graduation, I served two
- years of military duty, after which I joined the Engineering Department of
- 14 COM/Energy Services Company ("COM/Energy") in October 1970. In March 1973,
- I became a Rate Analyst with the Rate Department of COM/Energy where my
- primary responsibilities were to assist in the formulation and administration of gas
- and electric tariffs and special contracts for the operating subsidiaries of the
- 18 Commonwealth Energy System. Since then, I have held various positions in the Rate
- Department progressing to Manager Rate Design in March 1987. I held that

- position in the Commonwealth Energy System until its merger with BEC Energy was

  consummated in August 1999, whereupon I was named to my present position.
- 3 Q. Please describe your present responsibilities.
- A. As Director of Regulatory Policy and Rates, I am responsible for directing the preparation and design of rate schedules and the pricing of special contracts for NSTAR. In addition, I am responsible for directing the preparation of embedded and marginal cost allocation studies and other special cost studies as required supporting the pricing and rate design function.
- 9 Q. Have you previously testified in any formal hearings before regulatory bodies?
- 10 A. Yes, I have presented testimony before the Department of Public Utilities (the 11 "Department") and the Federal Energy Regulatory Commission ("FERC") on numerous occasions. I have most recently presented testimony before the 12 13 Department on behalf of NSTAR Electric in D.P.U. 07-64 regarding approval of the NSTAR Green program and two long-term renewable energy contracts. I have also 14 15 filed testimony in D.P.U. 07-81, which is NSTAR Electric's most recent transition charge reconciliation proceeding. Previously, I have presented testimony on behalf 16 of Cambridge Electric Company ("Cambridge"), Commonwealth Electric Company 17 ("Commonwealth") and Canal Electric Company in their comprehensive electric 18 restructuring plan (the "Restructuring Plan") proceeding, D.P.U./D.T.E. 97-111 19 20 (1998) and their divestiture proceeding, D.T.E. 98-78/83 (1998). I have also presented testimony on behalf of Cambridge, Commonwealth and Commonwealth 21

Gas Company in general rate proceedings before the Department in <u>Cambridge Light</u>

Company, D.P.U. 94/101/95-36 (1995), <u>Commonwealth Gas Company</u>, D.P.U. 95
102 (1995), and <u>Commonwealth Company</u>, D.P.U. 90-331 (1990). In addition, I

have presented testimony before the FERC concerning transmission service to the

Town of Belmont, in FERC Docket Nos. ER94-1409 and EL94-88.

## **Q.** What is the purpose of your testimony?

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A.

My testimony will describe and support the provisions of NSTAR Electric's proposed revised Energy Efficiency Charge ("EEC") tariffs, M.D.P.U. Nos. 107A, 207A and 307A, attached herewith as Exhibits NSTAR-HCL-1(a), (b) and (c), respectively. As noted by Ms. Conner in her testimony, the Company recovers expenditures for its electric energy efficiency programs through its currently effective EEC tariffs, M.D.T.E. Nos. 107, 207, and 307. These tariffs collect the statutorily-authorized system benefit charge ("SBC") of \$0.00250 per kilowatt-hour ("kWh") from each of the Company's customers. The SBC, as well as electric distribution company expenditures on energy efficiency programs, was capped pursuant to G.L. c. 25, § 19. However, the recently-enacted Green Communities Act ("GCA") (Chapter 169 of the Acts of 2008) codified an amendment to that statute that removes the cap on energy efficiency expenditures and allows expanded energy efficiency programs to be funded through additional sources, including: (1) amounts generated by distribution companies under the Forward Capacity Market program administered by ISO-New England; (2) cap and trade pollution control programs;

and (3) other funding approved by the Department after consideration of: (a) the effect of any rate increases on residential and commercial customers; (b) the availability of other private or public funds, utility administered or otherwise, that may be available for energy efficiency or demand resources; and (c) whether past programs have lowered the cost of electricity to residential and commercial customers. Accordingly, the Company is proposing to implement revised EEC tariffs consistent with the provisions of the GCA and Department precedent.

## 8 Q. Is the Company sponsoring other witnesses to support this filing?

9 A. Yes. The Company is sponsoring the testimony of Ms. Penelope McLean Conner,
10 who will describe the Company's proposed expanded 2008 Energy Efficiency Plan.

## Q. When will the proposed EEC tariffs take effect?

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The Company's revised EEC tariffs are proposed to become effective on January 1, 2009. The tariffs have been developed in response to: (1) the recently enacted GCA, which provides for significant expansion of energy efficiency programs throughout the Commonwealth; and (2) the Department's July 25, 2008, Hearing Officer Memorandum directing the electric companies to propose expanded 2008 energy efficiency programs. The Company understands the Department's goal of implementing expanded residential heating energy efficiency programs as soon as is feasible in 2008, and, therefore, is not proposing that the Department review and approve the Company's revised EEC tariff during the same time-frame as its review of the Company's expanded 2008 Energy Efficiency Plan. Rather, the Company is

Efficiency Plan as soon as is practicable, while also reviewing the Company's proposed cost recovery mechanism for effect by January 1, 2009. This would allow the Company to implement its revised EEC tariff so that these charges would go into effect on the same schedule as adjustments are made for the remainder of its 2009 rate tariffs, which will be filed with the Department on or about October 1, 2008.

#### 7 II. DESCRIPTION OF THE EEC TARIFFS

#### 8 Q. Please describe the revised EEC tariff.

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A. The Company's revised EEC tariff has two components. The first component is the base SBC of \$0.00250 per kWh, which the Company is authorized to collect pursuant to G.L. c. 25, § 19. The second component is a mechanism designated as the Energy Efficiency Reconciliation Factor ("EERF") that will allow the Company to reconcile actual expenditures incurred for Energy Efficiency programs approved by the Department of Public Utilities (the "Department") that differ from the revenues collected from the \$0.00250 per kWh SBC.

### Q. What is the purpose of the EERF?

17 A. The purpose of the EERF is to provide the Company with a mechanism to adjust, on
18 an annual basis and subject to the jurisdiction of the Department, its rates for
19 customers of distribution service to recover all costs associated with energy
20 efficiency and to reconcile energy efficiency revenue amounts collected in the
21 Company's rates with the total expense amounts booked by the Company for cost-

effective energy efficiency programs as approved by the Department. The EERF would be applicable to all firm distribution of electricity, measured in kWh, delivered by the Company, unless otherwise designated.

#### 4 Q. When is the Effective Date of the EERF?

As noted previously, the initial effective date is proposed to be January 1, 2009. The
EERF would be subject to change on the first day of each future calendar year,
unless otherwise ordered by the Department.

#### 8 Q. Please describe the components of EERF formula.

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The EERF ("EERF<sub>x</sub>") is defined in the EEC tariff as the annual Energy Efficiency Reconciliation Factor for a given calendar year "x". The EERF<sub>x</sub> is intended to reconcile the total costs of the Company's Energy Efficiency programs in a calendar year with the total revenue received by the Company for Energy Efficiency programs. The EERF<sub>x</sub> is proposed to be calculated by first adding the following cost components: (1) the forecasted total Energy Efficiency expenditures for a calendar year as included in the Company's Energy Efficiency budget ("EEE<sub>x</sub>"); and (2) lost-base revenues relating to the incremental energy efficiency programs approved by the Department ("LBR<sub>x</sub>"); and (3) interest on any differences between collections and expenditures ("I<sub>x</sub>").

The formula next subtracts forecasted revenues for the calendar year from the following sources: (1) the SBC ("EEC<sub>x</sub>"); and (2) "Forecasted Other Revenues" associated with the Forward Capacity Market, cap and trade programs, or other

funding approved by the Department ("OR<sub>x</sub>"). The last variable in the formula is the addition of the Past Period Reconciliation Amount ("PPRA<sub>x-1</sub>"), which consists of the difference between the amounts actually expended for the previous years for Energy Efficiency programs approved by the department and the revenues actually collected in previous years for Energy Efficiency Programs approved by the Department. Each of these components are combined and then, in the aggregate, divided by the forecasted amount of electricity to be distributed to the Company's distribution customers in municipalities in which the Company provides Energy Efficiency Programs for the calendar year ("FkWh<sub>x</sub>"). The FkWh<sub>x</sub> thus excludes those kWh for distribution customers located in municipalities in which energy efficiency programs are provided by a municipal aggregator like the Cape Light Compact (the "Compact"). As described below, the EERF will be collected from all distribution customers, and revenues from customers in municipalities served by the Compact will be transferred to the Compact to fund its energy efficiency programs. The EERF is represented in the EEC tariff as follows:

16  $EERF_x = (EEE_x + LBR_x - EEC_x - OR_x + PPRA_{x-1} + I_x)/FkWh_x$ 

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- Q. Please describe what types of costs are typically included in the Company's Energy Efficiency plan budget, for purposes of calculating EEE<sub>x</sub>.
- 19 A. The company's annual Energy Efficiency Plan budget typically includes:
- 20 (1) program planning and administration costs; (2) marketing costs; (3) sales costs;
- 21 (4) technical assistance and training costs; (5) evaluation and market research costs;

and (6) performance incentives. As the Company expands its Energy Efficiency 1 program offerings over the coming years, the Company will continue to incur these 2 types of program costs over and above those that have been recovered historically 3 through the base EEC. 4 5 Q. Is the Company proposing to change the formula by which it recovers Energy **Efficiency-related performance incentives?** 6 A. No. The Company's EERF will recover performance incentives in the same manner 7 8 as the Company has historically, pursuant to the Department's order in D.T.E. 98 -100. The only change is that the incentives will be based on a larger 9 10 budget as the Company expands its Energy Efficiency programs in a manner consistent with the GCA. 11 Q. Please describe how the Company provides revenues for energy efficiency 12 programs offered by municipal aggregators. 13 14 A. G.L. c. 164, § 134 authorizes municipalities to form aggregation programs that allow the member municipalities to collectively procure electric generation and to offer 15 16 energy efficiency services to their citizens. The Compact has been operating in the Company's service territory for several years pursuant to this statutory authority. To 17 date, the Company has collected its 2.5 mill SBC from the Company's customers in 18

municipalities that are part of the Compact and transfers those customer

contributions to the Compact for its use to provide energy efficiency programs.

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#### Q. How will payments to the Compact change in the future?

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A. The Company intends to continue to pass through to the Compact all energy efficiency revenues collected from customers in the municipalities served by the Compact, including incremental amounts received through the EERF. However, that portion of the EERF representing Lost Base Revenues will not be transferred to the Compact since the collection of Lost Base Revenues are intended to offset the Company's distribution rate revenue losses.

# 8 Q. Is the Company including Lost Based Revenues for its electric Energy Efficiency programs at this time?

Yes. The Company is proposing to recover Lost-Based Revenues associated with its incremental electric Energy Efficiency Program expenditures based on the Department's recently issued order in D.P.U. 07-50-A, which allows electric companies to propose recovery of lost-based revenues associated with energy efficiency programs that produce incremental energy efficiency savings that exceed the efficiency savings from their 2007 energy efficiency activities, until such time as a company has base rates approved by the Department that include a decoupling mechanism. D.P.U. 07-50-A at 83. Although the D.P.U. 07-50-A order states that LBR may be recovered as part of a company's 2009 energy efficiency plan, because the Company will be implementing expanded Energy Efficiency programs in 2008 based on the present proceeding, as well as during calendar year 2009, the Company is including an LBR component in the EERF to recover lost-base revenues associated with incremental energy efficiency expenditures prior to the company's

implementation of a decoupling mechanism at some point in the future. The amount 1 and method of computing LBR will be proposed more specifically in the Company's 2 2009 rate filing on October 1, 2008. 3 4 Q. How does the EERF incorporate the Company's Energy Efficiency revenues? 5 A. The EERF includes Energy Efficiency revenue sources consistent with G.L. c. 25, 6 § 19, including forecasted revenues to be collected in the forthcoming calendar year from: (1) the SBC; (2) the Forward Capacity Market program administered by ISO-7 8 NE, as defined in Section 1 of G.L. Chapter 164; (3) cap and trade pollution control 9 programs, including, but not limited to, and subject to Section 22 of G.L. Chapter 21A, not less than 80 per cent of amounts generated by the carbon dioxide allowance 10 11 trading mechanism established under the Regional Greenhouse Gas Initiative Memorandum of Understanding, as defined in subsection (a) of Section 22 of G.L. 12 13 Chapter 21A, and the NOx Allowance Trading Program; and (4) any other funding as 14 approved by the Department for Energy Efficiency programs. Q. Please describe the Past Period Reconciliation Amount component of the EERF. 15 A. The EERF includes a Past Period Reconciliation Amount, consistent with the 16 17 provisions of the GCA which authorize the Department to approve energy efficiency cost recovery mechanisms through a fully reconciling charge. G.L. c. 25, § 21. The 18 Past Period Reconciliation Amount included in the Company's EERF is the 19 difference between (a) the amounts actually expended for the previous years for 20 Energy Efficiency programs as approved by the Department and (b) the revenues 21

actually collected in previous years for Energy Efficiency programs as approved by
 the Department.

## Q. How does the Company propose to obtain Department approval of the EERF on a going-forward basis?

A. Information pertaining to the annual EERF shall be filed with the Department at least thirty (30) days before the date on which a new EERF is to be effective. In practice, the filing will be made annually with the Company's annual October 1 rate filing for rates effective January 1 of the following year. Such filing shall include preliminary reconciliation data for the year in which the filing is made, with final reconciliation amounts to be submitted the subsequent year. Additionally, the Company will file with the Department a complete list by (sub)account of all Energy Efficiency accounts claimed as recoverable through the EERF over the relevant calendar year. This information will be submitted with each annual EERF filing, along with complete documentation of the reconciliation-adjustment calculations.

## 15 Q. How does the Company propose to incorporate the EERF into its customers' bills?

A. The EERF will be incorporated into its customers' bills in the same manner as is currently authorized by the Company's Pension Adjustment Factor tariffs. The Company will notify customers in simple terms of changes to the EERF, including the nature of the change and the manner in which the EERF is applied to the bill. In the absence of a standard format, the Company will submit this notice for approval at the time of each EERF filing. Upon approval by the Department, the Company will

- immediately distribute these notices to all of its distribution customers either through
- 2 direct mail or with its bills.
- **Q.** Does this conclude your testimony?
- 4 A. Yes, it does.

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#### **ENERGY EFFICIENCY CHARGES**

The charges listed below shall be applied to all kilowatt-hours (kWh) delivered by the Company to a Customer.

#### **1.01 RATES**

The Energy Efficiency Charge ("EEC") shall be \$0.00250 per kWh:

In addition to the EEC, the Company shall reconcile actual expenditures incurred for Energy Efficiency programs approved by the Department of Public Utilities (the "Department") that differ from the revenues collected from the EEC through an Energy Efficiency Reconciliation Factor ("EERF"). The purpose of the EERF is to provide the Company a mechanism to adjust, on an annual basis and subject to the jurisdiction of the Department, its rates for customers of distribution service to recover all costs associated with energy efficiency and to reconcile energy efficiency revenue amounts included in the Company's distribution rates with the total expense amounts booked by the Company for energy efficiency programs.

#### 1.02 Applicability of EERF

This EERF shall be applicable to all firm distribution of electricity, as measured in kilowatthours ("kWhs"), delivered by the Company unless otherwise designated. For billing purposes, the EERF shall be included in the Distribution Charge.

#### 1.03 Effective Date of Annual Adjustment Factor

The date on which the annual EERF becomes effective shall be the first day of each calendar year, unless otherwise ordered by the Department. The Company shall submit EERF filings as outlined in Section 1.05 of this tariff at least 30 days before the filing is to take effect.

#### 1.04 EERF Formula

 $EERF_x = (EEE_x + LBR_x - EEC_x - OR_x + PPRA_{x-1} + I_x)/FkWh_x$ 

where

EERF<sub>x</sub> = The annual Energy Efficiency Reconciliation Factor for year "x"

 $EEE_x =$  The forecasted total Energy Efficiency expenditures for year "x" as included

in the Company's Energy Efficiency plan budget, including program

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#### **ENERGY EFFICIENCY CHARGES**

planning and administration costs; marketing costs; sales costs; technical assistance and training costs; evaluation and market research costs; and performance incentives

- $LBR_x = \begin{tabular}{ll} The Lost Base Revenues for year "x" as determined by multiplying: (a) \\ annual incremental kWh savings resulting from Energy Efficiency programs as approved by the Department by (b) the respective rate category recovery rate, both as approved by the Department from time to time. Whenever a general base rate proceeding is adjudicated by the Department, the Company will cease to recover, commencing with the effective date of the new base rate schedules, the Lost Base Revenues associated with actions taken prior to the test year used in said base rate proceeding. \\ \end{tabular}$
- $EEC_x =$  The forecasted revenues collected from the EEC for year "x"
- $OR_x = \qquad \qquad Forecasted Other Revenues for year "x" to be collected by the Company under the Forward Capacity Market program administered by ISO-NE, as defined in Section 1 of G.L. Chapter 164; the cap and trade pollution control programs, including, but not limited to, and subject to Section 22 of G.L. Chapter 21A, not less than 80 per cent of amounts generated by the carbon dioxide allowance trading mechanism established under the Regional Greenhouse Gas Initiative Memorandum of Understanding, as defined in subsection (a) of Section 22 of G.L. Chapter 21A, and the NOx Allowance Trading Program; or any other funding as approved by the Department for Energy Efficiency programs.$
- $I_x$  = The estimated interest for the forecast year "x". If the energy efficiency funds on December 31, 2008 are over or under the actual spending, that difference shall carry forward as an adjustment, with interest at the customer deposit rate, to the budget in the same customer sector in 2009.
- FkWh<sub>x</sub> = The Forecasted kWh defined as the forecasted amount of electricity to be distributed to the Company's distribution customers exclusive of customers

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#### **ENERGY EFFICIENCY CHARGES**

in municipalities served by a municipal aggregator that provides energy efficiency programs in the Company's service territory for the year "x".

#### 1.05 Information Required to be Filed with the Department

Information pertaining to the annual EERF shall be filed with the Department at least thirty (30) days before the date on which a new EERF is to be effective. Such filing shall include preliminary reconciliation data for the year in which the filing is made, with final reconciliation amounts to be submitted the subsequent year. Additionally, the Company will file with the Department a complete list by (sub)account of all Energy Efficiency accounts claimed as recoverable through the EERF over the relevant calendar year. This information will be submitted with each annual EERF filing, along with complete documentation of the reconciliation-adjustment calculations.

#### 1.06 Customer Notification

The Company will notify customers in simple terms of changes to the EERF, including the nature of the change and the manner in which the EERF is applied to the bill. In the absence of a standard format, the Company will submit this notice for approval at the time of each EERF filing. Upon approval by the Department, the Company must immediately distribute these notices to all of its distribution customers either through direct mail or with its bills.

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#### **ENERGY EFFICIENCY CHARGES**

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#### **1.01 RATES**

The Energy Efficiency Charge ("EEC") shall be \$0.00250 per kWh:

In addition to the EEC, the Company shall reconcile actual expenditures incurred for Energy Efficiency programs approved by the Department of Public Utilities (the "Department") that differ from the revenues collected from the EEC through an Energy Efficiency Reconciliation Factor ("EERF"). The purpose of the EERF is to provide the Company a mechanism to adjust, on an annual basis and subject to the jurisdiction of the Department, its rates for customers of distribution service to recover all costs associated with energy efficiency and to reconcile energy efficiency revenue amounts included in the Company's distribution rates with the total expense amounts booked by the Company for energy efficiency programs.

#### 1.02 Applicability of EERF

This EERF shall be applicable to all firm distribution of electricity, as measured in kilowatthours ("kWhs"), delivered by the Company unless otherwise designated. For billing purposes, the EERF shall be included in the Distribution Charge.

#### 1.03 Effective Date of Annual Adjustment Factor

The date on which the annual EERF becomes effective shall be the first day of each calendar year, unless otherwise ordered by the Department. The Company shall submit EERF filings as outlined in Section 1.05 of this tariff at least 30 days before the filing is to take effect.

#### 1.04 EERF Formula

 $EERF_x = (EEE_x + LBR_x - EEC_x - OR_x + PPRA_{x-1} + I_x)/FkWh_x$ 

where

EERF<sub>x</sub> = The annual Energy Efficiency Reconciliation Factor for year "x"

EEE<sub>x</sub> = The forecasted total Energy Efficiency expenditures for year "x" as included

in the Company's Energy Efficiency plan budget, including program

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#### **ENERGY EFFICIENCY CHARGES**

planning and administration costs; marketing costs; sales costs; technical assistance and training costs; evaluation and market research costs; and performance incentives

- $LBR_x =$  The Lost Base Revenues for year "x" as determined by multiplying: (a) annual incremental kWh savings resulting from Energy Efficiency programs as approved by the Department by (b) the respective rate category recovery rate, both as approved by the Department from time to time. Whenever a general base rate proceeding is adjudicated by the Department, the Company will cease to recover, commencing with the effective date of the new base rate schedules, the Lost Base Revenues associated with actions taken prior to the test year used in said base rate proceeding.
- $EEC_x =$  The forecasted revenues collected from the EEC for year "x"
- $OR_x = \qquad \qquad Forecasted Other Revenues for year "x" to be collected by the Company under the Forward Capacity Market program administered by ISO-NE, as defined in Section 1 of G.L. Chapter 164; the cap and trade pollution control programs, including, but not limited to, and subject to Section 22 of G.L. Chapter 21A, not less than 80 per cent of amounts generated by the carbon dioxide allowance trading mechanism established under the Regional Greenhouse Gas Initiative Memorandum of Understanding, as defined in subsection (a) of Section 22 of G.L. Chapter 21A, and the NOx Allowance Trading Program; or any other funding as approved by the Department for Energy Efficiency programs.$
- T<sub>x</sub> = The estimated interest for the forecast year "x". If the energy efficiency funds on December 31, 2008 are over or under the actual spending, that difference shall carry forward as an adjustment, with interest at the customer deposit rate, to the budget in the same customer sector in 2009.
- FkWh<sub>x</sub> = The Forecasted kWh defined as the forecasted amount of electricity to be distributed to the Company's distribution customers exclusive of customers

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#### **ENERGY EFFICIENCY CHARGES**

in municipalities served by a municipal aggregator that provides energy efficiency programs in the Company's service territory for the year "x".

#### 1.05 Information Required to be Filed with the Department

Information pertaining to the annual EERF shall be filed with the Department at least thirty (30) days before the date on which a new EERF is to be effective. Such filing shall include preliminary reconciliation data for the year in which the filing is made, with final reconciliation amounts to be submitted the subsequent year. Additionally, the Company will file with the Department a complete list by (sub)account of all Energy Efficiency accounts claimed as recoverable through the EERF over the relevant calendar year. This information will be submitted with each annual EERF filing, along with complete documentation of the reconciliation-adjustment calculations.

#### 1.06 Customer Notification

The Company will notify customers in simple terms of changes to the EERF, including the nature of the change and the manner in which the EERF is applied to the bill. In the absence of a standard format, the Company will submit this notice for approval at the time of each EERF filing. Upon approval by the Department, the Company must immediately distribute these notices to all of its distribution customers either through direct mail or with its bills.

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In addition to the EEC, the Company shall reconcile actual expenditures incurred for Energy Efficiency programs approved by the Department of Public Utilities (the "Department") that differ from the revenues collected from the EEC through an Energy Efficiency Reconciliation Factor ("EERF"). The purpose of the EERF is to provide the Company a mechanism to adjust, on an annual basis and subject to the jurisdiction of the Department, its rates for customers of distribution service to recover all costs associated with energy efficiency and to reconcile energy efficiency revenue amounts included in the Company's distribution rates with the total expense amounts booked by the Company for energy efficiency programs.

#### 1.02 Applicability of EERF

This EERF shall be applicable to all firm distribution of electricity, as measured in kilowatthours ("kWhs"), delivered by the Company unless otherwise designated. For billing purposes, the EERF shall be included in the Distribution Charge.

#### 1.03 Effective Date of Annual Adjustment Factor

The date on which the annual EERF becomes effective shall be the first day of each calendar year, unless otherwise ordered by the Department. The Company shall submit EERF filings as outlined in Section 1.05 of this tariff at least 30 days before the filing is to take effect.

#### 1.04 EERF Formula

 $EERF_x = (EEE_x + LBR_x - EEC_x - OR_x + PPRA_{x-1} + I_x)/FkWh_x$ 

where

EERF<sub>x</sub> = The annual Energy Efficiency Reconciliation Factor for year "x"

EEE<sub>x</sub> = The forecasted total Energy Efficiency expenditures for year "x" as included

in the Company's Energy Efficiency plan budget, including program

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#### **ENERGY EFFICIENCY CHARGES**

planning and administration costs; marketing costs; sales costs; technical assistance and training costs; evaluation and market research costs; and performance incentives

- $LBR_x =$  The Lost Base Revenues for year "x" as determined by multiplying: (a) annual incremental kWh savings resulting from Energy Efficiency programs as approved by the Department by (b) the respective rate category recovery rate, both as approved by the Department from time to time. Whenever a general base rate proceeding is adjudicated by the Department, the Company will cease to recover, commencing with the effective date of the new base rate schedules, the Lost Base Revenues associated with actions taken prior to the test year used in said base rate proceeding.
- $EEC_x =$  The forecasted revenues collected from the EEC for year "x"
- $OR_x = \qquad \qquad Forecasted Other Revenues for year "x" to be collected by the Company under the Forward Capacity Market program administered by ISO-NE, as defined in Section 1 of G.L. Chapter 164; the cap and trade pollution control programs, including, but not limited to, and subject to Section 22 of G.L. Chapter 21A, not less than 80 per cent of amounts generated by the carbon dioxide allowance trading mechanism established under the Regional Greenhouse Gas Initiative Memorandum of Understanding, as defined in subsection (a) of Section 22 of G.L. Chapter 21A, and the NOx Allowance Trading Program; or any other funding as approved by the Department for Energy Efficiency programs.$
- T<sub>x</sub> = The estimated interest for the forecast year "x". If the energy efficiency funds on December 31, 2008 are over or under the actual spending, that difference shall carry forward as an adjustment, with interest at the customer deposit rate, to the budget in the same customer sector in 2009.
- FkWh<sub>x</sub> = The Forecasted kWh defined as the forecasted amount of electricity to be distributed to the Company's distribution customers exclusive of customers

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#### **ENERGY EFFICIENCY CHARGES**

in municipalities served by a municipal aggregator that provides energy efficiency programs in the Company's service territory for the year "x".

#### 1.05 Information Required to be Filed with the Department

Information pertaining to the annual EERF shall be filed with the Department at least thirty (30) days before the date on which a new EERF is to be effective. Such filing shall include preliminary reconciliation data for the year in which the filing is made, with final reconciliation amounts to be submitted the subsequent year. Additionally, the Company will file with the Department a complete list by (sub)account of all Energy Efficiency accounts claimed as recoverable through the EERF over the relevant calendar year. This information will be submitted with each annual EERF filing, along with complete documentation of the reconciliation-adjustment calculations.

#### 1.06 <u>Customer Notification</u>

The Company will notify customers in simple terms of changes to the EERF, including the nature of the change and the manner in which the EERF is applied to the bill. In the absence of a standard format, the Company will submit this notice for approval at the time of each EERF filing. Upon approval by the Department, the Company must immediately distribute these notices to all of its distribution customers either through direct mail or with its bills.

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President Effective: January 1, 2009